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بِسْمِ اللَّهِ الرَّحْمَٰنِ الرَّحِيمِ
رَبِّ زِدْنِي عِلْمًا

FREE RESOURCE

Resources Consulted

1. National Institute for Health and Care Excellence (NICE) Guidelines
2. Oxford Handbook of General Practice (5th Edition)
3. Swanson's Family Medicine Review (9th Edition)
4. Master the Boards: USMLE Step 2 CK (7th Edition)
5. American Academy of Family Physicians (AAFP) Guidelines
6. WHO Antibiotics Guidelines 2022

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Disclaimer: This is free resource, updated and revised just to make aspiring family physicians' life easy
No monetary benefits intended. Omissions excepted. Person compiling this wishes to remain anonymous, please do remember in your prayers.
(آپ کی دعائیں مجھ تک پہنچ جائیں گی🙂)

رَبِّ زِدْنِي عِلْمًا

Dedicated to

Professor Dr Nasir Shah

MCPS, FCPS, MRCGP (INT), FRCGP (INT)

In recognition of his tireless efforts in advancing the field of Family Medicine, equipping students for examinations and clinical practice, and contributing significantly to the improvement of primary healthcare. Whom I consider My mentor and whose teachings has a profound effect on me

Special Thanks to **Dr Fakhra Ayyub** for Her Compassionate and Ethical Approach towards Teaching and for Addressing Her Students' Queries with Professionalism and Care.

Also, to my Laptop for bearing with me through this arduous task of reproducing such a vast resource. 😜

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Important Guidelines - Links

- NICE guidelines – https://www.nice.org.uk/guidance;
- JNC guidelines https://www.justintimemedicine.com/curriculum/201
- WHO AWaRe (Access, Watch, Reserve) guidelines https://www.who.int/publications/i/item/9789240062382
- ADA guidelines – the American Diabetes Association standards https://diabetesjournals.org/care/issue/48/Supplement_1
- GINA (Global Initiative for Asthma) guidelines – https://ginasthma.org/2024-report/
- GOLD (Global Initiative for Chronic Obstructive Lung Disease) guidelines – https://goldcopd.org/2024-gold-report/
- WHO TB guidelines https://www.who.int/publications/digital/global-tuberculosis-report-2021/featured-topics/tb-guidelines

رَبِّ زِدْنِي عِلْمًا

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ENT

1. A 23 years old university student has been suffering from sore mouth off and on especially at the time of meals for the last three years. There are superficial, round, 3-4 mm erosions on lateral side of tongue and hard palate.
What is the single most effective treatment for healing of lesions?

A. Dexamethasone paste

B. Doxycycline gargles

C. Folic Acid Supplement

D. Lignocaine gel

E. Oral Metronidazole

a. Aphthous Ulcer - Painful white ulcers. Usually idiopathic but may be associated with poor health, stress, Crohn's, coeliac, and Behçet's diseases. Most are short-lived. Large ulcers (up to 2cm diameter) can take ~6wk to heal. Most resolve spontaneously. Topical therapies are effective, e.g. hydrocortisone lozenges qds(dissolve in contact with the ulcer). Refer any ulcer not significantly improving >3wk after presentation to exclude malignancy. OHGP 5th Ed Page 909

2. A 50 years old religious scholar presents with sore mouth especially at the time of meals for the last *6 weeks*. There is *single 1 cm erosion* on the lateral side of tongue.
What is the most appropriate step?

A. Biopsy of ulcer

B. Cauterization

C. Dexamethasone paste

D. Lignocaine gel

E. Miconazole oral gel

a. Urgent referral - To be seen in <2wk by a specialist oral surgeon: Mouth ulceration persisting for >3wk. OHGP 5th Ed Page 908

3. A 27 years old truck driver presents with *three days* history of fever, halitosis, pain and bleeding from gums. He also has a history of sore gums. There is a *deep necrotic ulcer* about 1 cm^2 at the base of tongue and *swollen gingiva*. He is taking *Metronidazole 400 mg TDS*.
Which one of the following drugs would you like to add?

A. Ciprofloxacin

B. Cotrimoxazole

C. Doxycycline

D. Erythromycin

E. Penicillin

e. Vincent's angina - Pharyngeal infection with ulcerative gingivitis. Management: phenoxymethylpenicillin 250mg qds po + metronidazole 400mg tdspo. OHGP 5th Ed Page 910

4. A 29 years old man presents with painful ulcers in mouth since 2 weeks. He also has watery eyes, ulcers on penis, and multiple joint pains. What is the single most likely diagnosis?

A. Bechet's disease

B. Lymphogranuloma venereaum

C. Reiter's syndrome

D. Schogren's Syndrome

E. Secondary Syphilis

a. Multi-organ disease of unknown cause (although thought to be infective). Clinical picture (only some features): arthritis; ocular symptoms and signs—pain, ↓ vision, floaters, iritis; scarring painful ulceration of mouth and/or scrotum; colitis; meningoencephalitis. Refer to GUM clinic, ophthalmologist or general physician depending on symptom cluster. Treatment is usually with steroids ± azathioprine or ciclosporin. Topical steroids may be useful for ulcers. OHGP 5th Ed Page 493

5. A 50 years old man presents with (R) earache since 2 months mostly during meals. Pain increases on opening the mouth. His ear examination and hearing tests are normal.
What is the most appropriate initial step?

A. Facial nerve stimulation

B. Injectable steroids

C. Referral for surgery

D. Symptomatic treatment

E. X-ray of TM Joint

d. Temporomandibular joint (TMJ) dysfunction - Do not X-ray as this yields little useful information—CT/MRI may be requested by specialists. Reassure and explain the benign nature of the disorder. Suggest simple analgesia, e.g. paracetamol ± ibuprofen. Resting the jaw and avoiding stress may help. Refer those with ongoing problems to oral surgery for review. OHGP 5th Ed Page 911

6. 7 years old girl has been brought by mother after recovery from recent sore throat in which she was given antibiotics. She has missed her school 5 times in the last 2 years. Her weight is 25 kg. Her tonsils are enlarged bilaterally.
What is the most appropriate next step?

A. Amoxicillin

B. Azithromycin

C. Pheniramine

D. Reassurance

E. Tonsillectomy

d. The Paradise Criteria for Tonsillectomy specify the minimum frequency of sore throat episodes required to consider surgical intervention. According to the criteria, a patient should have experienced at least seven episodes of sore throat in the previous year, at least five episodes in each of the previous two years, or at least three episodes in each of the previous three years. https://www.aafp.org/pubs/afp/issues/2011/0901/p566.html

7. A 19 years old boy presents with one week history of malaise, fever, sore throat and nausea. There are exudates on tonsils, petechiae on palate and bilateral posterior cervical lymphadenopathy.
What is the most appropriate step?

A. Acyclovir

B. Amoxicillin

C. Paracetamol

D. Referral

E. Throat culture

c. Glandular fever (infectious mononucleosis) - Advise rest, fluids, and regular paracetamol, avoid alcohol. Try salt-water gargles or aspirin gargles (only if >16y). Consider a short course of prednisolone for severe symptoms. Treat 2° infection with antibiotics. Advise to avoid contact sports/heavy lifting for >1mo due to risk of splenic rupture. Symptoms may last several months). Do not prescribe amoxicillin as it may cause a rash. OHGP 5th Ed Page 913

8. A 40 years old smoker presents with hoarseness of voice for 3 weeks. He is otherwise, fine. What is the most appropriate initial step?

A. Direct Laryngoscopy

B. Indirect Laryngoscopy

C. Speech therapy

D. Steam inhalation

E. Voice rest

a. Weight ↓, dysphagia, or neck lumps add to suspicions of malignancy. Check TFTs in those with weight gain. Indirect laryngoscopy with a mirror can be difficult and give a poor view. ENTdepartments have thin fibreoptic scopes for direct visualization in outpatients. OHGP 5th Ed Page 914.

9. A 43 years old man presents with right sided nasal blockage off and on since two weeks. He has a long history of runny nose, post nasal drip and disturbance in smell and taste. There is visible pink mobile mass in right nasal cavity with *superficial erosion*.
What is the most appropriate step?

A. Beclomethasone

B. Beclomethasone spray

C. Paranasal sinus washouts

D. Referral to ENT

E. X-ray paranasal sinuses

d. Refer unilateral polyps with an unusual or irregular appearance especially if ulcerating and/or bleeding, for exclusion of malignancy. OHGP 5th Ed Page 919.

10. A 35 yrs old woman presents with 5 days history of fever, sore throat, yellow nasal discharge and pain in cheeks which is worse on bending forwards.
What is the single most appropriate therapy?

A. Nasal decongestants

B. Nasal steroid spray

C. Normal saline gargles

D. Oral antibiotics

E. Oral antihistamine

a. Acute sinusitis – Usually resolves in 7–10d. Advise analgesia (paracetamol ±ibuprofen), fluids ± steam inhalation. Decongestants— Although little evidence of effectiveness, but used to easy drainage. OHGP 5th Ed Page 920

11. A 27 years old sales representative presents with two years history of post nasal drip, cough, need to clear throat off and on and nasal blockage.
What is the single best long term therapy?

A. Nasal decongestants

B. Nasal steroid spray

C. Normal saline gargles

D. Oral antihistamine

E. Oral Ketotifen

b. Nasal steroids -Effective if applied properly, and can be used safely long term. Take several days to work—try for >2wk before abandoning. Often started at high dose—when symptoms are controlled, dose is ↓ to the minimum that maintains symptom control. OHGP 5th Ed Page 921

12. A 24 years old man presents with pain in left ear since 2 days. The entire left external meatus is inflamed. Movement of tragus is *painful*. What is the most likely diagnosis?

A. Eczema

B. Furunculosis

C. Hematoma

D. Otitis externa

E. Perichondritis

d. Acute otitis externa - <6wk duration. Presents with ear pain (often severe), discharge (may be offensive), and hearing loss ± lymphadenopathy behind/in front of the ear. If the ear canal is not obscured by debris/discharge, it appears red, swollen, and inflamed. Moving the pinna may be painful. Acute episodes have a tendency to recur. OHGP 5th Ed Page 922

13. A 25 years old man comes to your clinic and tells you that one of fast friend put a *small object* in his ear during playing. You examined his ear and found a small object attached to the superior aspect of the ear canal
How would you manage this patient?

A. Antibiotic drops and refer

B. Attempt once to remove

C. Immediately refer to ENT

D. Leave it as such

E. Remove under anesthesia

b. Foreign bodies in the ear - Most common in children. If the patient is cooperative, try to remove under direct vision with forceps but avoid pushing objects deeper into the canal and causing damage; removal under GA may be needed. Insects can be drowned in oil and syringed out. OHGP 5th Ed Page 1090

14. A 24 years old woman complains of earache for 2 days after Tonsillectomy. She is using oral antibiotics. Her hearing and Tympanic membranes are normal bilaterally. What is the most appropriate step management?

A. Antibiotic ear drops

B. Lignocaine ear drops Refer

C. Reassurance

D. Urgent referral

E. Valsalva maneuver

c. Referred Pain - Glossopharyngeal nerve - After Tonsillectomy

15. A 7 years old boy presents with fever and severe pain in right ear since 2 days. The child is febrile, irritable and the tympanic membrane is red and bulging.
What is the single most appropriate initial treatment?

A. Amoxicillin

B. Gentamycin ear drops

C. Grommet insertion

D. Paracetamol

E. Urgent Referral

a. Acute suppurative otitis media (OM) - Ear pain—usually unilateral ± fever/systemic upset. Ear discharge may be associated with relief of pain if there is a spontaneous perforation of the ear drum. Examination: red, bulging drum, Consider prescribing immediately (e.g. amoxicillin tds) for children with bilateral OM or acute OM with otorrhoea. OHGP 5th Ed Page 924

16. A 5 years old girl presents with heaviness of right ear since 1 month. The child is other*wise fine and scores good in school*. The tympanic membrane looks *dull with air bubbles*. How would you manage this patient?

A. 2 weeks antibiotics

B. Audiometry

C. Follow up as out patient

D. Grommet insertion

E. X-ray nasopharynx

c. Serous/secretory otitis media (glue ear) - Untreated, 75% have no symptoms in <3mo; 5% have bilateral hearing loss persisting >12mo. Glue ear resolves as the child grows older—treatment is aimed at ↓ impact of symptoms until natural resolution. If not resolving, refer to community audiology/ENT depending on local policy. Specialist treatment options include watchful waiting or grommet insertion. OHGP 5th Ed Page 924

17. A 27 years old housewife presents with pain in left ear since 5 days. The pain is aggravated by the chewing and laughing. The left ear canal is edematous, red, and filled with debris.
What is the single most appropriate initial step?

A. Antihistamine

B. Oral antibiotics

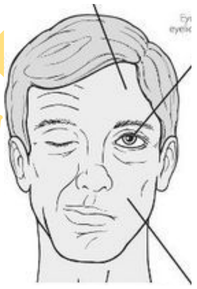
C. Remove debris

D. Topical antibiotics

E. Topical steroids

c. Ear syringing - Indicated if impacted wax causes loss of hearing, discomfort, or tinnitus. Avoid syringing if there is deafness in the other ear or a history of perforation of the ear drum (including grommet), previous mastoid operation, or chronic middle ear disease (e.g. chronic suppurative otitis media, cholesteatoma). If ear syringing is contraindicated, refer to ENT for wax removal under direct vision, e.g. with microsuction. OHGP 5th Ed Page 923

18. A 45 years old diabetic man presents with pain in right ear since 2 days. On examination there are few vesicles on the external ear canal. You also noticed the following facial features. What is the most likely diagnosis?



A. Acoustic neuroma

B. Diabetic mononeuropathy

C. Idiopathic Bells palsy

D. Ramsay Hunt Syndrome

E. Upper motor neuron lesion

d. Ramsay Hunt syndrome (herpes zoster oticus) - Severe pain in the ear precedes facial nerve palsy. Zoster vesicles appear around the ear, in the external ear canal, on the soft palate, and in the tonsillar fossa. Often accompanied by deafness ± vertigo which are slow to resolve and may result in permanent deficit. Pain usually abates after 48h but post-herpetic neuralgia can be a problem. If detected <24h after the rash appears, treatment with antivirals (e.g. aciclovir 800mg 5×/d for 1wk) may be effective. OHGP 5th Ed Page 512

19. A 27 years old man presents with inability to close right eye and drooling of water from side of mouth since 5 hours. His health is generally good. All his facial movements *including forehead* are asymmetrical. Pupillary reflexes and eye movements are normal.
What is the most appropriate step at this stage?

A. Acyclovir

B. MRI brain

C. Prednisolone

D. Reassurance

E. Referral

c. Bell's Palsy - Give prednisolone (25mg bd for 10d) if <72h after onset of symptoms. Protect eye—tape lid shut and pad at night; glasses in the day ± artificial tears if drying. OHGP 5th Ed Page 512

20. A 6 years old girl presents with 2 days history of fever, difficulty in swallowing, drowsiness There is a *gray layer in the throat* and the neck is swollen. Her pulse is 130 minute and extremities are cold.
What is the single most appropriate initial step?

A. IV Amoxicillin

B. IV Hydrocortisone

C. Refer for admission

D. Remove membrane

E. Throat culture

c. Diphtheria - characterized by an inflammatory exudate which forms a greyish membrane in the respiratory tract (may cause respiratory obstruction). C. diphtheriae secretes a toxin which affects myocardium, nervous, and adrenal tissues. dmit for antitoxin and IV antibiotics. Patients may be infectious for up to 4wk but carriers shed C. diphtheriae for longer. OHGP 5th Ed Page 633

21. A 45 years old woman presents to your clinic with a *painless lump on the left side of her neck* since 2 months and hematemesis. She has lost 4 Kg during this period.
What is the most likely diagnosis?

A. Gastric carcinoma

B. Hodgkins lymphoma

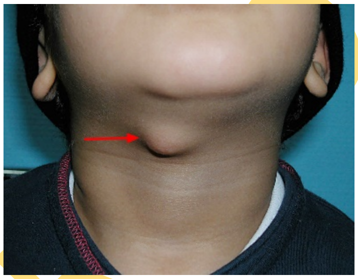
C. Pancoast's tumor

D. Thyroid carcinoma

E. Tuberculous lymphadenitis

a. Virchow's Nodes - Gastric carcinoma

22. A 9 years old girl presents with a small swelling in the neck since birth. It is painless and is not growing in size.
Which single clinical test would be most use in this case?



A. Indirect laryngoscopy

B. Protruding tongue

C. Swallowing water

D. Trans illumination

E. Valsalva maneuver

b. Thyroglossal cyst - The thyroid gland develops from the lower portion of the thyroglossal duct. If a portion of this duct remains patent it can form a thyroglossal cyst. Usually presents in young adults (peak age 15–30y) with either a painless, smooth, cystic midline swelling between the isthmus of the thyroid gland and the hyoid cartilage, or just above the hyoid cartilage or, if the cyst is inflamed, a painful, tender lump with localized swelling. Examination: the cyst rises as the patient sticks out the tongue. Refer to ENT for excision. OHGP 5th Ed Page 916

23. A 45 years old chronic betel nut eater presents with difficulty in opening his mouth since 6 months. The oral mucosa is thick and white all over
What is the most likely diagnosis?

A. Leukoplakia

B. Mucosal atrophy

C. Oral Thrush

D. Scleroderma

E. Sub mucous fibrosis

e. The most likely diagnosis is Submucous fibrosis. This condition is strongly associated with chronic betel nut (areca nut) chewing and presents with progressive difficulty in opening the mouth (trismus) due to fibrosis of the oral mucosa. The thick, white appearance of the mucosa is characteristic of this precancerous condition.

24. A 9 years old boy presents to your clinic with fever, throat pain, drooling and restlessness. There is an audible husky inspiratory sound. How would you manage this patient?

A. Examine throat for membrane

B. Insert oral airway

C. IV hydrocortisone

D. Referral for admission

E. Salbutamol nebulizer

d. Acute epiglottitis in children - Bacterial infection causing a swollen epiglottis. Can potentially obstruct the airway. Much rarer since introduction of routine Haemophilus influenza type b (Hib) immunization. Consider if stridor, drooling, fever, and upright 'leaning-forward' posture. If suspected, do not examine the child's throat as this can precipitate complete obstruction. Management: Refer urgently but try to maintain a calm atmosphere to avoid distressing the child. Examination will be undertaken in hospital with full resuscitation facilities on hand. Treatment: IV antibiotics. OHGP 5th Ed Page 915

25. A 3 year old with foul-smelling bloody discharge from right nostril since 4 weeks. What is the most likely diagnosis?

A. Adenoidal Hypertrophy

B. Atrophic rhinitis

C. Foreign body in nose

D. Fungal sinusitis

E. Right nasal polyp

c. Foreign bodies in the nose - Common in young children. Any child with smelly discharge from one nostril has a foreign body in the nose until proven otherwise—refer for exploration under GA. Do not try to remove yourself unless the object is very superficial and the child cooperative. You might push the object further in and cause trauma. OHGP 5th Ed Page 1090

26. A 19 year old rugby player who has been hit on the nose and is now complaining of bilateral nasal obstruction. There is bright red midline swelling visible from both nostrils obstructing nasal passage.
What is the single most appropriate management step?

A. Cold compression

B. Decongestant

C. Evacuation

D. Needle aspiration

E. Steroid spray

c. Septal haematoma - May occur after injury and causes nasal blockage. Presents as a bilateral soft bulging of the septum. Refer urgently to ENT for evacuation to prevent cartilage destruction. OHGP 5th Ed Page 919

27. A 43-year-old woman is suffering from chronic nasal obstruction and discharge. She has been using over the counter nasal sprays for months but feels that the problem is worsening.

A. Atrophic rhinitis

B. Fungal sinusitis

C. Nasopharyngeal carcinoma

D. Rhinitis medicamentosa

E. Septal hematoma

d. Topical/oral decongestants e.g. ephedrine nasal drops tds/qds. Effective (drops >>oral preparations) in ↓ nasal congestion. Discourage use of nasal drops for >10d as vasoconstriction → mucosal damage →worsening of nasal congestion—a vicious cycle termed rhinitis medicamentosa. Not caused by oral preparations. OHGP 5th Ed Page 921

28. A 30 year old man presents with a 2 history of malaise, fever, halitosis, painful swallowing and inability to open mouth. There is bulge in left side of pharynx and there is shifting uvula to right side.
What is the single most likely diagnosis?

A. Acute pharyngitis

B. Acute Tonsillitis

C. Peritonsillar abscess

D. Pharyngeal abscess

E. Vincent's angina

c. Quinsy (peritonsillar abscess) Usually occurs in adults. Signs:, difficulty speaking, swallowing (even saliva), and opening jaw (trismus). Refer for IV antibiotics ± incision/drainage. OHGP 5th Ed Page 912

29. A 7 year old boy presents with a 10 day history of malaise, low grade fever and a painful discharging ear. There is tenderness behind right ear and you are unable to visualize the tympanic membrane.
What is the most likely diagnosis?
A. Boil in ear

B. Fungal infection

C. Mastoiditis

D. Otitis externa

E. Otitis media

c. Mastoiditis - Rare complication of acute OM—infection spreads to the mastoid. Symptoms: persistent, throbbing earache; creamy, profuse ear discharge; ↑ conductive deafness; fever and general malaise. Signs: tenderness ± swelling over the mastoid; ear may stick out; drum is red/bulging or perforated—if the ear drum is normal, it is not mastoiditis. Refer to ENT as an emergency. Treatment is with IVantibiotics. OHGP 5th Ed Page 925

30. A 6 year old girl presents to you with bilateral ear discharge. Her mother tells you that she keeps her mouth open all the time. Her weight is 16 KG.
Which single investigation would you order to confirm your diagnosis?

A. Complete Blood Count

B. Culture of ear discharge

C. Throat swab for culture

D X ray of nasopharynx

E. X-ray paranasal sinuses

d. The most appropriate investigation is X-ray of nasopharynx. This presentation suggests adenoidal hypertrophy, which can cause eustachian tube dysfunction leading to bilateral ear discharge and mouth breathing. An X-ray of the nasopharynx can confirm the presence of enlarged adenoids.

31. A 45 years old woman presents with episodic history of dizziness, ringing in ears, earache and progressive sensorineural deafness since three years. What is the most likely diagnosis?

A. Acoustic neuroma

B. Basilar insufficiency

C. Benign Positional vertigo

D. Mennier's disease

E. Otosclerosis

d. Ménière's syndrome - Overdiagnosed in patients with recurrent vertigo and deafness. It is a complex of symptoms including clustering of attacks of vertigo and nausea, tinnitus, a sense of fullness in the ear, and sensorineural deafness which may be progressive. Aetiology: idiopathic dilation of endolymphatic spaces. OHGP 5th Ed Page 929

32. A 39 year old female presents with a four days history of dizziness. The dizziness is associated with nausea and vomiting. There is no hearing loss, tinnitus or ear pain. The patient has just recovered from an upper-respiratory tract infection. Nystagmus and ataxia are present. What is the most likely diagnosis in this patient?

A. Acute labyrinthitis

B. Benign positional vertigo

C. Meniere's disease

D. Orthostatic hypotension

E. Vestibular neuronitis

e. Vestibular neuronitis - Symptoms: vertigo (lasting days), no hearing loss, no ear pain, no other symptoms; may result from upper respiratory tract infection. Treatment: rest, reassurance, antiemetics, antihistamines, benzodiazepines symptomatically. Swanson Family Medicine Review (Page 278)

33. A 26 year old female presents with six days history of severe dizziness associated with ataxia and right ear heaviness and mild deafness. She had an upper-respiratory tract infection 1 week ago. Nystagmus and ataxia are present. What is the most likely diagnosis in this patient?

A. Acute labyrinthitis

B. Acute Otitis media

C. Benign positional vertigo

D. Meniere’s disease

E. Vestibular neuronitis

a. Acute labyrinthitis - Symptoms: vertigo (lasting days) and associated hearing loss usually follow an upper respiratory tract infection in which there is a middle ear effusion. Treatment: rest, antiemetics, antibiotics if middle ear fluid is infected. Swanson Family Medicine Review (Page -278)

34. A 65 years old man presents with gradual bilateral hearing loss since 2 years specially when he is in a gathering. His tympanic membranes appear normal. Rennie test positive on both sides and Weber is central. What is the most likely cause?

A. Acoustic neuroma

B. Impacted wax

C. Meniere's disease

D. Otosclerosis

E Presbycusis

e. Sensorineural hearing loss - The most common cause is presbycusis, which is a gradual deterioration that starts with high-frequency loss and often involves all speech frequencies by the sixth or seventh decade. Swanson Family Medicine Review (Page -278)

35. A 45 years old man presents with gradual bilateral hearing loss since last 7 months. There is no history of ear discharge or tinnitus. His tympanic membranes appear normal. Rennie is negative on both sides and Weber is central What is the most likely cause?

A. Acoustic neuroma

B. Labyrinthitis

C. Meniere's disease

D. Otosclerosis

E. Presbycusis

d. Conductive hearing loss - Pathologic condition and causation: Conductive hearing loss involves either chronic serous otitis media or otosclerosis. Otosclerosis is a localized disease of the otic capsule in which new spongy bone replaces normal bone, producing ankylosis or fixation of the stapes footplate. Swanson Family Medicine Review (Page -279)

36. A 42 years old man present with 103°F fever, runny nose, right sided severe facial pain which is more on bending forwards since last 3 days. His right maxillary bone is tender. What is single most appropriate drug for him?

A. Cefuroxime

B. Amoxicillin

C. Cotrimoxazole

D. Doxycycline

E. Erythromycin

b. Acute sinusitis - Infection of ≥1 paranasal sinus (maxillary, frontal, ethmoid, or sphenoid). Usually follows URTI—10% are due to tooth infection. Presents with frontal headache/facial pain (may be difficult to distinguish from toothache)—typically worse on movement/bending ± purulent nasal discharge ± fever. Antibiotics (e.g. amoxicillin 500mg tds)—only if severe symptoms, symptoms persisting >2.5wk, or high risk of serious complications (e.g. CF, immunosuppression). OHGP 5th Ed Page 920

37. A 48 year old man complains of hearing loss. tinnitus in the right ear, and vertigo for the past 6 months. He has facial palsy on the right side. Which of the following is the most likely diagnosis?
A. Acoustic neuroma

B. Basilar insufficiency

C. Horner's syndrome

D. Ramsay Hunt syndrome

E. Right sided Bell palsy

a. Slow-growing neurofibroma arising from the acoustic nerve. Symptoms: unilateral sensorineural deafness, tinnitus, ± facial palsy. Management: Refer to ENT. Treatment is surgical. Refer urgently to ENT to exclude acoustic neuroma if unilateral or asymmetrical sensorineural deafness. OHGP 5th Ed Page 927

EYE

1. A 25 years old man presents with acute pain in and redness of eyes. There is circumcorneal the left eye, with blurring of vision, watering injection, constricted and irregular pupil, and What is the most likely diagnosis?

A. Anterior Uveitis

B. Corneal Ulcer

C. Open angle glaucoma

D. Optic Neuritis

E. Vitreous hemorrhage

a. Iritis (anterior uveitis) - Acute onset of pain, photophobia, blurred vision, and ↓ visual acuity, watering, circumcorneal redness, small or irregular pupil ± keratitic precipitates on the posterior surface of the cornea ± hypopyon(anterior chamber pus, causing a white ‘fluid-level’ line). Pain ↑ as eyes converge and pupils constrict. In 30% associated with seronegative arthropathies, e.g. ankylosing spondylitis. Management - Refer urgently to ophthalmology. Complications include posterior synechiae (irregular pupil shape), glaucoma, and cataract. Relapses are common. OHGP 5th Ed Page 947

RED EYE – SWANSON FAMILY MEDICINE REVIEW

	Acute Conjunctivitis	Acute Iritis	Acute Glaucoma	Corneal Trauma or Infection
Incidence	Extremely common	Common	Uncommon	Common
Discharge	Moderate to copious	None	None	Watery or purulent
Vision	No effect	Slightly blurred	Markedly blurred	Usually blurred
Pain	None	Moderate	Severe	Moderate to severe
Conjunctival Injection	Diffuse, more toward fornices	Mainly circumcorneal	Diffuse	Diffuse
Cornea	Clear	Usually, clear	Steamy	Change in clarity related to cause
Pupil Size	Normal	Small	Moderately dilated and fixed	Normal
Pupillary Light Response	Normal	Poor	None	Normal
Intraocular Pressure	Normal	Normal	Elevated	Normal
Smear	Causative organisms	No organisms	No organisms	Organisms found only in corneal ulcers

2. A 55 years old male presents with blurring of vision and watering from his right eye since last few days. His pupil is slightly dilated and fixed and there is circumcorneal redness. He is suffering from one of the following conditions.

A. Corneal ulceration

B. Retinal artery occlusion

C. Retinal vein occlusion

D. Right eye Glaucoma

E. Right optic neuritis

d. Acute closed-angle glaucoma (ACAG) - Vision ↓; cornea looks hazy (due to oedema); pupil is fixed and dilated (often slightly oval in shape with long axis vertical); circumcorneal redness; eyeball feels hard (due to ↑ pressure); poor fundal view ± cataract. OHGP 5th Ed Page 955

3. A new born baby has been brought by mother for routine checkup. Red reflex is absent bilaterally and there are cardiac murmurs on auscultation. She gives a history of fever during pregnancy.

Which one of the following eye manifestations he has?

A. Bupthalmos

B. Ophthalmia neonatorum

C. Retinoblastoma

D. Rubella infection

e. Rubella - Fetuses exposed during gestation may develop congenital rubella syndrome. Common abnormalities include deafness, eye defects,central nervous system anomalies, cardiac malformations (patent ductus arteriosus and pulmonic stenosis), and mental retardation. Swanson Family Medicine Review (Page 831)

4. A 28 years old female presents with swelling on the lower eye lid with pussy discharge pointing outward. Which one of the following condition she has?

A. Acute blepharitis

B. Acute dacryocystis

C. Hordeolum externum

D. Hordeolum internum

E. Meibomian cyst

c. External stye (hordeolum externum) - Most common form of stye. Infection of a lash follicle or associated gland of Moll (sweat gland) or Zeis (sebum gland) usually by Staphylococcus aureus. Confined to the skin and always points outwards. Treat with hot compresses. Use of antibiotics is controversial. Generally only use topical antibiotic (e.g. chloramphenicol) if associated bacterial conjunctivitis. OHGP 5th Ed Page 941

5. 5 years old male presents with swelling of both upper eye lids for last three months. His mouth and eyes are dry. Which one of the following is the most likely diagnosis?

A. Behcet's syndrome

B. Chronic dacryocystitis

C. Keratoconjunctivitis sicca

D. Sjogren's syndrome

E. Vitamin A deficiency

d. Sjogren's syndrome - Symptoms include Joint pain (90% of patients), Dryness of the mouth and eyes, Produces the need to constantly drink water, Causes difficulty swallowing, especially dry foods, Causes rampant dental caries +/− tooth loss as a result of reduced, saliva (whose main function is to physically wash food off teeth and neutralize acid). OHGP 5th Ed Page 497

Ocular abnormalities, giving a feeling of “sand in the eyes” plus burning and itching (called keratoconjunctivitis sicca)

6. A 65 years old male complains that he is not able to see passing cars on both sides while he is driving since last few months. He has had minor accidents during this period. What is the most appropriate diagnostic test?

A. CT scan brain

B. Florescence Angiography

C. MRI of brain

D. Ophthalmoscopy

E. Perimetry

c. MRI Brain to visualize any pathology causing compression of optic chiasm, causing Bitremporal hemianopia.

7. A 45 years old female complains of diplopia, bilateral ptosis and fatigue in the evening for months which is gradually increasing. Which one of the following will help in the diagnosis?

A. Atropine injection

B. Botulinum

C. Edrophonium

D. Epinephrine

E. Neostigmine

c. Myasthenia gravis (MG) is a disorder of muscular weakness from the production of antibodies against acetylcholine receptors at the neuromuscular junction, Edrophonium: short-acting inhibitor of acetylcholinesterase. The temporary bump up in acetylcholine levels is associated with a clear improvement in motor function that lasts for a few minutes.
Electromyography (most accurate test) shows decreased strength with repetitive stimulation. Master the boards 11th Ed

8. A 35 years old female presents with difficulty in closing her right eye and drooling of water from right side of mouth since 2 days. All her facial movement including forehead are asymmetrical. Which is the single most appropriate treatment for her right eye?

A. Cromoglycate

B. Dexamethasone

C. Oxybuprocaine

D. Phenylephrine

E. Polyvinyl alcohol

e. Bells’s Palsy - Protect eye—tape lid shut and pad at night; glasses in the day ± artificial tears like Polyvinyl alcohol if drying. OHGP 5th Ed Page 512

9. A 58 years old female presents with blurring of vision for the last 2 years. Her problem is increasing day by day. She has changed her spectacles four times in this period. What is the single most probable diagnosis?

A. Anterior Uveitis

B. Cataract

C. Glaucoma

D. Macular degeneration

E. Retinal detachment

b. Cataract presentation - Blurred vision and gradual loss of vision, Dazzles and halos around objects—especially in sunlight, Frequent spectacle changes due to changing refractive index. OHGP 5th Ed Page 956

10. 1 year old boy is brought by his parents complaining that he is unable to see distance objects. He has squint and nystagmus since birth. A shadow is seen in red reflex. What will be the most appropriate cause?

A. Inherited glaucoma

B. Microphthalmia

C. Polar cataract

D. Retinoblastoma

E. Sub capsular cataract

c. Polar cataract - Presents with squint, white pupil, nystagmus, amblyopia, or loss of binocular vision. If detected, refer urgently to ophthalmology for specialist management. OHGP 5th Ed Page 957

11. 45 years old male comes 2 weeks after cataract surgery still having disturbance in vision. He seeks your advice about new glasses. How long should he wait after surgery to get new glasses?

A. 3 weeks

B. 4 weeks

C. 5 weeks

D. 6 weeks

E. 8 weeks

d. Cataract surgery - >90% of cataract extraction procedures are carried out in people ≥60y. Removal of the natural lens ± posterior chamber lens implantation. Usually a day case procedure under LA. Healing takes 2–6wk depending on the technique used. 75–95% without other ocular pathology have 6/12 vision or better 3mo post-op. Patients need testing for new spectacles 6wk post-op. OHGP 5th Ed Page 956

12. 45 year's old patient comes for routine eye checkup. His eye balls feel hard on digital palpation and there is loss of visual field. What is the single most appropriate initial treatment?

A. Laser trabeculectomy

B. Oral prostaglandin

C. Topical Dexamethasone

D. Topical pilocarpine

E. Topical Timolol

d. Refer acute or subacute glaucoma as an emergency to ophthalmology. Specialist treatment is with meiosis to open drainage channels (e.g. pilocarpine 4% drops) and acetazolamide ±apraclonidine and/or latanoprost drops to ↓ aqueous production. Surgery or laser treatment (peripheral iridotomy) to allow free aqueous circulation is undertaken once intraocular pressure has been ↓. Patients may need prophylactic surgery on the contralateral eye to prevent ACAG in that eye too. ACAG may damage the trabecular meshwork and patients are at risk of developing chronic glaucoma following an attack. Regular check-ups are necessary. OHGP 5th Ed Page 955

13. A four years play group student has been brought by parents complaining of eye tiredness & headache. He watches TV from very close distance. Convergent squint is also present on examination. What is the most appropriate treatment option?

A. Concave lenses

B. Convex lenses

C. Eye exercises

D. Glasses+ patching

E. LASIK

b. Hypermetropia (long sight) - Most common refractive error. Common in infants and lessens with age. Distant objects focus behind the retina. Ciliary muscle contraction (to make the lens more convex) is needed to focus the image. This can lead to convergent squint, eye tiredness, and headache. Convex lenses are used for correction. OHGP 5th Ed Page 958

14. Parents bring four months boy with the complaint of intermittent deviation of eyes. What is the most appropriate next step?

A. Follow up at 1 year of age

B. Follow up at 2 years of age

C. Follow up at 6 months of age

D. Reassure the parents

E. Refer immediately

e. Pseudosquint - Intermittent deviation of the eyes in neonates Common. Check red reflex is present. Normally settles by 3mo—squint after this time is significant. OHGP 5th Ed Page 959

15. A 45 years diabetic patient presents with diplopia & holding head tilted. Right eye cannot look down & inwards. Which cranial nerve is most likely involved?

A. 3rd

B. 4th

C. 5th

D. 6th

E. 7th

b. 4th Trochlear nerve - Superior oblique muscle is paralysed. Causes diplopia and torticollis. The eye cannot look down and inwards. OHGP 5th Ed Page 959

16. A 45 years old healthy patient presents with increase sweating & shortness of breath after using some eye drops. His BP is 160/100 mm Hg. Which one of the following is most likely responsible for his problem?

A. Amethocaine

B. Cyclopentolate

C. Dexamethasone

D. Pilocarpine

E. Timolol

d. Pilocarpine – Parasympathomimetic effects like Bronchoconstriction, Urinary urgency, Diaphoresis (sweating), and Salivation (increased saliva production). OHGP 5th Ed Page 960

17. A 40 yrs male presents with pain and redness of his right eye for the last two days. The pupil reacts sluggishly to light. How will you manage this case?

A. Atropine

B. Chloramphenicol

C. Cromoglycate

D. Dexamethasone

E. Urgent referral

e. Iritis (anterior uveitis) - Acute onset of pain, photophobia, blurred vision, and ↓ visual acuity, watering, circumcorneal redness, small or irregular pupil ± keratitic precipitates on the posterior surface of the cornea ± hypopyon (anterior chamber pus, causing a white 'fluid-level' line). Pain ↑ as eyes converge and pupils constrict. In 30% associated with seronegative arthropathies, e.g. ankylosing spondylitis. Management - Refer urgently to ophthalmology. Complications include posterior synechiae (irregular pupil shape), glaucoma, and cataract. Relapses are common. OHGP 5th Ed Page 947

18. A 16 yrs old boy presents with redness and pain deep in eye after being hit by a tennis ball one hour ago. What is the single best step in management?

A. Cold compresses

B. Diclofenac drops

C. Gentamycin ointment

D. Paracetamol orally

E. Referral

e. 'Blow-out' fracture of the orbit - Uncommon fracture due to blunt trauma to the eye (e.g. squash ball injury). Can present with blurred or double vision and pain on moving the eye. Signs: enophthalmos (often masked by swelling), infraorbital nerve loss, and inability to look upwards due to trapping of inferior rectus muscle. Refer for X-ray and assessment of eye trauma via A&E. OHGP 5th Ed Page 937

19. A 2 days old new born is having purulent discharge from both the eyes. He was born at home. What is the single most appropriate initial step in management?

A. Chloramphenicol eye drops

B. Frequent eye cleaning

C. IV Ceftriaxone

D. Nasolacrimal duct massage

E. Take swab for C/S

e. Ophthalmia neonatorum - is conjunctivitis in an infant aged <30d. Most commonly caused by Chlamydia trachomatis or Neisseria gonorrhoeae. Send swabs for nucleic acid amplification testing (NAAT) and M,C&S. Seek immediate specialist advice if confirmed. OHGP 5th Ed Page 716

20. A 25 years old male presents with fever, right eye pain and prominence of the eye ball. He had pain in the forehead and blocked nose in the last week. What is the single most appropriate diagnosis?

A. Acute glaucoma

B. Anterior uveitis

C. Dacryocystitis

D. Orbital cellulitis

E. Preseptal cellulitis

d. Orbital cellulitis - Typically due to spread of infection from the paranasal sinuses. Usually presents with pain, double/blurred vision, and general malaise. Signs: fever, eyelid swelling, proptosis, and inability to move the eye. Severe cases can lead to septicaemia, meningitis, and cavernous sinus thromboses. If suspected, refer immediately to ophthalmology for IV antibiotics/surgical drainage. OHGP 5th Ed Page 939

21. A 30 yrs old male presents with pain and redness in the right eye for the last 2 days. These are blisters on the right side of the forehead. What is the most appropriate treatment for him?

A. Acyclovir orally

B. Bacitracim skin cream

C. Chloramphenical drops

D. Dexamethasone drops

E. Fluocloxacillin orally

a. Ophthalmic shingles - Zoster in the ophthalmic branch of the oculomotor (3rd) nerve. Pain, tingling, or numbness around the eye precedes a blistering rash and inflammation. In 50% the eye is affected with conjunctivitis, scleritis, episcleritis, keratitis, iritis, visual loss, and/or oculomotor nerve palsy. Nose tip involvement (Hutchinson's sign) makes eye involvement likely (nerve supply is the same as the globe). Prescribe oral aciclovir (800mg 5×/d) and refer immediately. The cornea may become anaesthetic/scarred and require grafting. OHGP 5th Ed Page 947

22. A 30 years old male presents with pain in his left eye for the last three days. There is redness around the cornea. What is the best step in management?

A. Chloramphenical drops

B. Pilocarpine drops

C. Prednisolone drops

D. Reassurance

E. Referral

e. Orbital cellulitis - Typically due to spread of infection from the paranasal sinuses. Usually presents with pain, double/blurred vision, and general malaise. Signs: fever, eyelid swelling, proptosis, and inability to move the eye. Severe cases can lead to septicaemia, meningitis, and cavernous sinus thromboses. If suspected, refer immediately to ophthalmology for IV antibiotics/surgical drainage. OHGP 5th Ed Page 939

23. A blacksmith complains of pain & redness of eye for the last one hour. There is a small wound in the cornea. No foreign body is present. What is the single best initial step in management?

A. Atropine eye drops

B. Chloramphenicol ointment

C. Diclofenac drops

D. Eye padding

E. X-rays of orbit

e. Penetrating wounds - Refer urgently to eye casualty if penetrating injury is a possibility, i.e. history of flying object or working with hammers, drills, lathes, or chisels where a metal fragment may fly off. X-ray/CT scan can confirm diagnosis and help locate the foreign body. OHGP 5th Ed Page 937

24. A 30 years old male presents to your clinic with a 4 x 1 inches^2 size metal piece pierced into the sclera after a blast injury. What is the best step in management?

A. Attempt once to remove foreign body

B. Fix foreign body with pad and refer

C. Refer immediately without intervention

D. Remove foreign body & apply pad

E. Remove foreign body & refer

b. Do not remove large foreign bodies (dart or knife) - Support the object with padding while transferring the patient supine to eye casualty or A&E. Cover the other eye to prevent damage from conjugate movement. OHGP 5th Ed Page 937

E RESOURCE

25. A 30 yrs old male presents with pain, blurring of vision and redness of left eye. fluorescein staining shows branching ulceration. What is the most appropriate treatment?

A. Acyclovir eye drops

B. Atropine eye drops

C. Chloramphenical drops

D. Dexamethasone drops

E. Gentamycin ointment

a. HSV keratitis is common and can be recurrent in the same eye with the virus lying dormant within the trigeminal nerve between attacks. Presents with acute keratitis or keratoconjunctivitis. Occasionally may present as an irritable eye with little discomfort. Examination and fluorescein staining reveals a characteristic corneal ulcer with a delicate branching pattern (dendritic ulcer). Refer for urgent (same-day) ophthalmology opinion. Treatment is with 3% aciclovir ointment 5×/d continued for 3d after healing.

There is a danger of massive amoebic ulceration and blindness if steroid eye drops are administered to patients with dendritic ulcer. OHGP 5th Ed Page 946

26. A 60 yrs old diabetic and hypertensive male presents with sudden loss of vision in his right eye. There are extensive hemorrhages in the retina. What is the single most likely diagnosis?

A. Back ground retinopathy

B. Proliferative retinopathy

C. Retinal artery occlusion

D. Retinal detachment

E. Retinal vein occlusion

e. Retinal vein occlusion - Incidence ↑ with age. More common than arterial occlusion. Presents with:

- Sudden loss of vision in one eye—typically on waking (branch retinal vein occlusion causes partial visual loss) ± afferent pupil defect
- Fundus like 'a stormy sunset'—scattered haemorrhages, engorged veins, disc swelling ± cotton wool spots
- Refer as an emergency to ophthalmology. OHGP 5th Ed Page 950

27. A 40 yrs old diabetic male presents with gradual loss of vision in his right eye over a period of 10 days. He is unable to differentiate between colors. His optic disc shows papilledema. What is the possible diagnosis?

A. Diabetic retinopathy

B. Hypertensive retinopathy

C. Macular degeneration

D. Open angle glaucoma

E. Optic neuritis

e. Optic neuritis - Disc swelling due to inflammation or demyelination. Presents with rapid visual loss (hours–days) and ↓ colour vision (red desaturation); discomfort on eye movements; temporary worsening of symptoms when hot; optic disc swelling. Refer urgently to ophthalmology for confirmation of diagnosis. Steroids may help in severe cases. Visual loss usually stabilizes after week 2 and recovers over 6wk. OHGP 5th Ed Page 951

28. A 50 years old diabetic female complaints of decrease vision in right eye for 1 week. She feels curtain across the vision and bright flash lights. What is the possible diagnosis?

A. Diabetic Maculopathy

B. Diabetic retinopathy

C. Preproliferative diabetic retinopathy

D. Retinal detachment

E. Retinal vein occlusion

d. Retinal detachment - Presentation:

- Painless loss of vision—'like a curtain' coming across the vision
- Rate of detachment can vary. Upper retinal detachments tend to occur more quickly—causing loss of lower part of vision
- 50% have premonitory symptoms—flashing lights or floaters before eyes due to abnormal retinal stimulation prior to the detachment. OHGP 5th Ed Page 950

29. A 55 years old diabetic and hypertensive presents with pain in his right eye and gradual loss of vision for the last one month. He is using Pilocarpine eye drops. The optic disc is pale What is the possible direct cause of his problem?

A. Age

B. Diabetes

C. Glaucoma

D. Hypertension

E. Idiopathic

E RESOURCE

c. Chronic simple glaucoma (open-angle) (COAG) - May be detected during routine optometrist examination or through routine screening for diabetes or for patients with family history. Otherwise, patients present late as glaucoma is asymptomatic and visual acuity is preserved until visual fields are severely impaired. Signs: optic nerve damage (glaucomatous disc cupping), visual field loss (sausage-shaped blind spots), and ↑ IOP. OHGP 5th Ed Page 954

30. A 5 days old baby has been brought in by mother with complaints of bilateral purulent eye discharge, eye lid swelling and redness of eyes. His mother is a housewife and father is a truck driver who is out of town most of the time. Which single topical antibiotic would you like to prescribe if you have the choice?

A. Chloramphenicol

B. Gentamycin

C. Neomycin

D. Polymixin

E. Tetracycline

e. The severe symptoms of bilateral frothy purulent discharge of eye with eyelid swelling and redness of eyes in newborn indicate the diagnosis of ophthalmia neonatorum. First line treatment is tetracycline and if not available than can be used other drugs like as Erythromycin eye ointment, Chloramphenicol ointment, Gentamycin ointment for a total of 14 days.

31. A 17 years old boy comes to your clinic with redness of both eyes since 2 days. There is burning and watering of eyes. Two of her classmates had the same problems in the last week. Which medicine would you like to start at this stage?

A. Acyclovir eye drops

B. Betamethosone eye drops

C. Chloramphenicol eye drops

D. Nephazolin eye drops

E. Tobramycin eye drops

d. The symptoms indicate the viral conjunctivitis which is a self-limiting infection. Spread is controlled by hand hygiene and avoiding shaking hands. Symptomatic treatment is washing with cold water, artificial tears and vaso-constrictive drops like Naphazoline. Chloramphenicol or topical antibiotics are advised to prevent secondary infection which can lead to keratitis and blindness. Since in this question only symptomatic treatment is asked, so the correct answer is Naphazoline. In cases of allergic conjunctivitis symptomatic relieve is provided by oral antihistamines and topical Naphazoline in short term. In long term mast cell stabilizers are advised

32. A 19 years old boy presents to your clinic with redness and itching of both eyes off and on since 1 year. Which medicine would you like to prescribe for long term control of the disease?

A. Betamethasone

B. Chloramphenicol

C. Chromoglycate

D. Naphazolin

E. Tobramycin

c. In cases of allergic conjunctivitis symptomatic relieve is provided by oral antihistamines and topical nephazolin in short term. In long term mast cell stabilizers are advised

RESOURCE

33. A 30 days old baby has been brought in by mother with complaints of watering of eye and bilateral white eye discharge since 1 week. There is soft boggy swelling near the inner canthus. The eye lids and conjunctiva a normal. The baby is active otherwise. What is the most likely 'outcome of this condition?

A. Dacrocystorhinoplasty by the age of year

B. Long term topical antibiotic therapy

C. Needs probing at the age of 3 months

D. Spontaneous resolution by the age of 6 months

E. Surgical intervention as soon as possible

d. Infantile dacryocystitis (blocked tear duct) - Advise parents to bathe the lids with cooled boiled water. Avoid antibiotic eye drops unless there is clear infection. Spontaneous resolution is the norm. 4% fail to clear by 1y—refer to a paediatric ophthalmologist. Treatment is by probing the duct to clear it. OHGP 5th Ed Page 943

34. A 47 years old woman has come to your clinic for the third time with stye in last six months What could be the most appropriate measure this stage?

A. Eye lash epilation by laser

B. Prophylactic antibiotic for 3 months

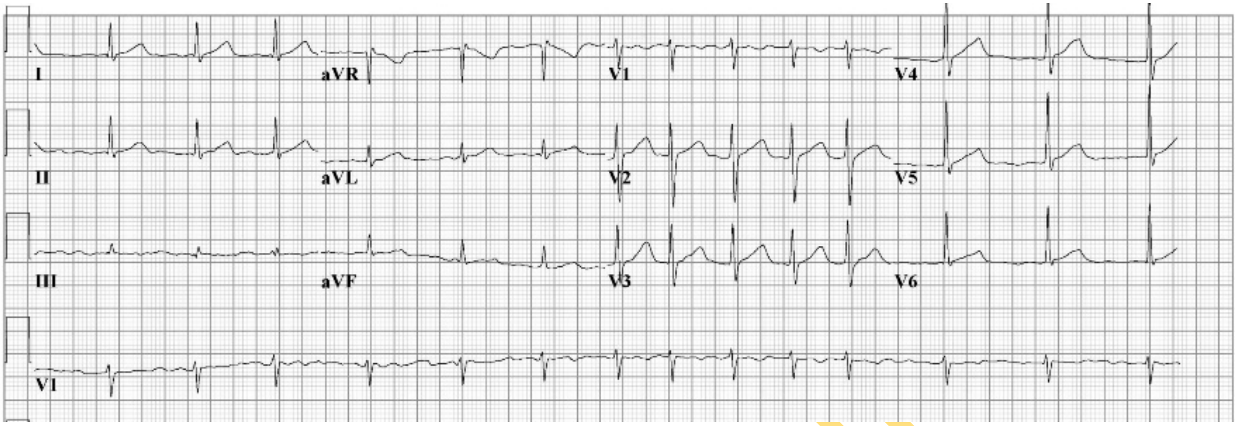
C. Screening for Diabetes

D. Treatment for Chlamydia infection
E. Vitamin A supplementation

c. Recurrent stye can be associated with underlying conditions like diabetes mellitus, which impairs immunity and increases susceptibility to infections. Given the frequency of episodes, it is appropriate to screen for diabetes at this stage

CVS

1. A 41 year old business executive presents to your clinic and complains of palpitations and shortness of breath. After further questioning, he admits to heavy alcohol consumption the previous evening. On examination, he is found to have an irregular heart beat of 130 bpm. The most likely diagnosis is:



A. Ventricular tachycardia

B. Ventricular fibrillation

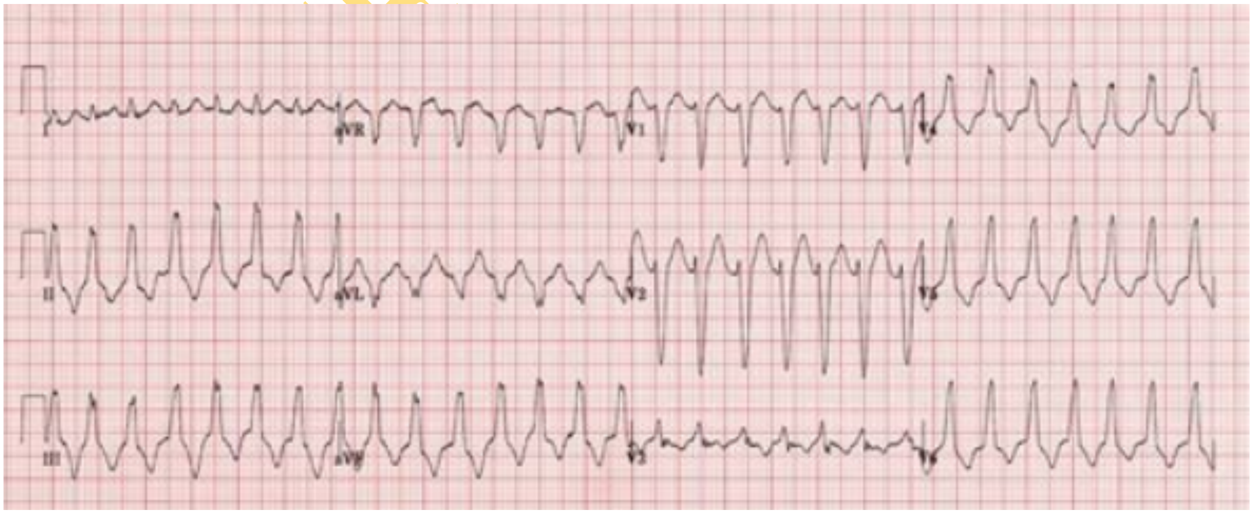
C. Premature ventricular contractions

D. Atrial fibrillation

E. Wolff-Parkinson-white syndrome

d. Acute AF - May be precipitated by acute infection, **high alcohol intake**, surgery, electrocution, MI, pericarditis, PE, or hyperthyroidism. OHGP 5th Ed Page 240

2. Mr. Junaid has rushed in to your clinic with palpitations. There is no chest pain, sweating or shortness of breath. On examination his pulse is 140 bpm. His ECG shows: Supposing you have all required medicines, which one medicine would you choose in this case?



A. Digoxin

B. Verapamil

C. Adenosine

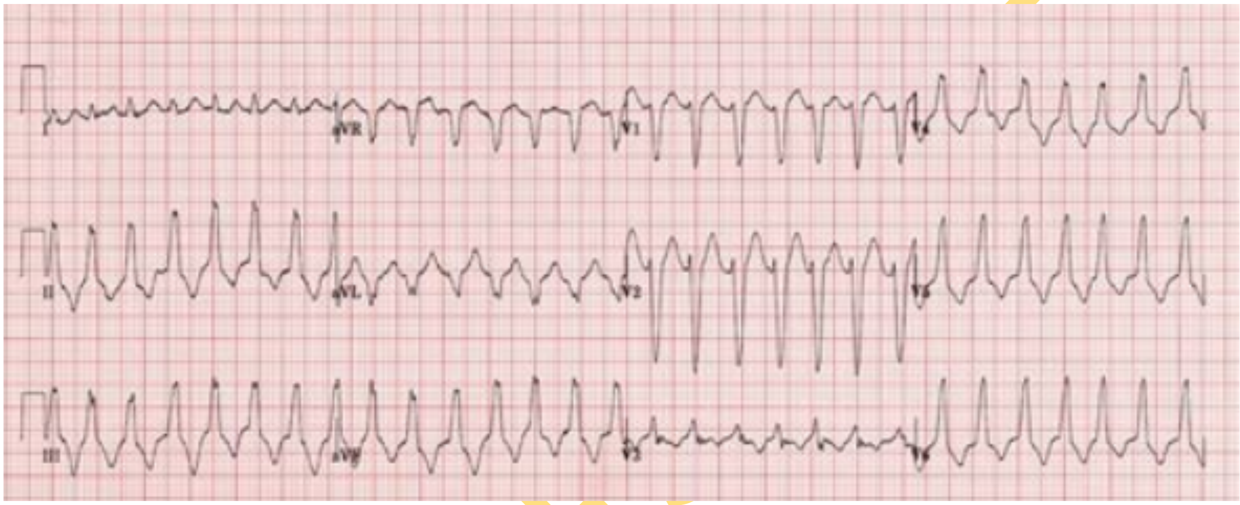
D. Diltiazem

E. Lignocaine

c. Adenosine – Used for rapid conversion of supraventricular tachycardia; effective for arrhythmias involving the AV node.

3. A 60 year old man with obstructive pulmonary disease due to long-term smoking presents with shortness of breath for 3 days. He also has palpitations for 1 to 2 hours. Examination shows diffuse expiratory wheeze. His pulse is irregular.

His ECG shows.



Which of the following medications would you avoid in this patient?

A. Digoxin

B. Verapamil

C. Amiodarone

D. Metoprolol

E. Hydrochlorthiazide

d. Diffuse expiratory wheeze suggests some asthmatic features, so β blockers are contraindicated, although Verapamil is also best Avoided in COPD

4. A 17-year-old girl was found unconscious with several pill bottles next to her. On physical exam the patient has dilated pupils, tachycardia, flushed skin, and muscle twitches. ECG identifies wide QRS complex in most of leads.

What medication is most likely responsible for her condition?

A. Morphine

B. Amitriptyline

C. Clonidine

D. Haloperidol

E. Diazepam

FREE RE

b. Amitriptyline – Causes anticholinergic toxicity (tachycardia, flushed skin, dilated pupils).

5. A 21 years old man, who was running high grade fever for 2 months, has come to see you. On examination he looks pale, pulse is 110 bpm, temperature is 102^0 F, first heart sound is loud and there are both systolic and diastolic murmurs.

What is the most common organism causing this condition?

A. Strept viridans

B. Staph aureus

C. Strept pneumonae

D. Hemophilus influenzae

E. E.coli

a. Infective endocarditis: cause - Common organisms Strep. viridans (35–50%); Staph. aureus (20%), Non-bacterial causes SLE, malignancy. OHGP 5th Ed Page 244

6. Mr. Nafees is a 40 years old clerk, does not smoke and has been coming in your clinic with chest pain. His ECG, ETT and echo which were done on his request are all normal. His recent coronary angiogram is normal as well. Which statement is most accurate in this case?

A. Cognitive behavior therapy reduce the number of days with chest pain

B. Comorbid psychiatric symptoms rare.

C. Reassuring that the cause noncardiac usually eliminates symptoms.

D. No treatment is needed because functional impairment is rare.

E. Repeat angiogram after 6 weeks

a. Cognitive behavior therapy – Reduces symptoms in non-cardiac chest pain related to anxiety.

7. What do NICE Guidelines recommend about starting antihypertensive medicines in 40 years old patients with hypertension and No comorbid illness?

A. Calcium channel blocker.

B. ACE inhibitor with or without a diuretic.

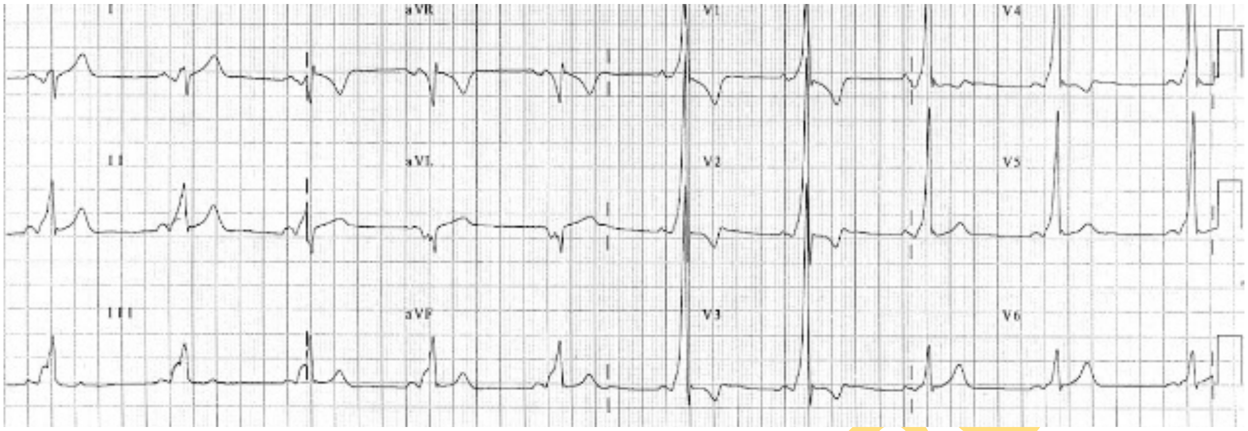
C. Low dosage of a diuretic or beta blocker.

D. Centrally acting antihypertensive agent.

E. Combination therapy.

b. ACE inhibitor – Recommended first-line therapy for hypertension in patients <55 without comorbidities.

8. A 25 years old man presents with episodes of light headedness. He has no significant past medical history. Cardiac examination is normal. Chest X-ray and ECG are normal as well. A 24 hour tape (Holter Monitor) is requested.



Which arrhythmia might be most likely to cause his symptoms?

A. Ventricular extra-systole

B. First degree heart block

C. Atrial extra-systole

D. Supraventricular tachycardia

E. Wenkebach phenomenon

d. Supraventricular tachycardia – Commonly causes lightheadedness with normal cardiac tests.

9. A 59 year old lady has a history of hypertension and has recently been prescribed a new antihypertensive agent. She now has fevers and joint pains in the arms, shoulders, knees and ankles. Which of the following drugs could cause this?

A. Thiazide

B. Atenolol

C. Methyldopa

D. Amlodipine

E. Lisinopril

C. Methyldopa – Associated with fever, joint pain, and systemic lupus-like syndrome.

10. According to ATP - III (Adult Tteatment Panel) which causes of secondary dyslipidemia should be considered when evaluating a patient with high LDL?

A. Diabetes, hypothyroidism

B. Obstructive liver diseases

C. Chronic kidney disease

D. A and C

E. All of the above

e. All of the above – All listed conditions cause secondary dyslipidemia.

11. A 35 years old woman comes with joint pains and body aches. Her C-reactive Protein (CRP) is raised.

Which one of the following conditions is the most likely diagnosis?

A. Hepatitis C

B. Osteoarthritis

C. Rheumatoid arthritis

D. SLE

E. Leukaemia

c. Rheumatoid arthritis – Check FBC (normochromic normocytic or hypochromic, microcytic anaemia), ESR, and/or **CRP** (i). May have ↑platelets, ↓ WCC, Rheumatoid factor and anti-CCP antibodies are +ve in the majority. A minority have a +ve ANA titre, X-rays—normal, periarticular osteoporosis or soft tissue swelling in the early stages; later—loss of joint space, erosions, and joint destruction. OHGP 5th Ed Page 488

12. Mrs. Radha is a 45 years old woman has been seeing you for her diabetes. You have started her on Coated Aspirin 75 mg daily.

The role of Aspirin in this case is an example of

A. Primary prevention

B. Secondary prevention

C. Tertiary prevention

D. Primary treatment

E. Secondary treatment

a. Primary prevention – Aspirin reduces cardiovascular events in diabetic patients without prior CV disease. Primary prevention is **Prevention of disease occurrence**, e.g. childhood vaccinations; prophylactic mastectomy for women with BRCA1/2 mutations

13. Mr. Soomro 32 years old comes to your clinic with exertional chest pain and shortness of breath. He does not smoke and occasionally goes for a 30 minutes walk. Two of his brothers died because of heart attack before the age of 40 years. His ETT shows ST segment depression in antero-lateral chest leads.

If you want to screen his family which one test would you advise next for his first degree relatives.

A. ECG

B. Angiography

C. Echocardiography

D. Exercise tolerance test

E. Lipid profile

d. Exercise tolerance test for screening in family members

14. Regarding the obesity in relation to the risk of cardiovascular disease, which of the following statements is (are) true?

A. Obesity is a risk factor for hypertension

B. Obesity is a risk factor hypercholesterolemia

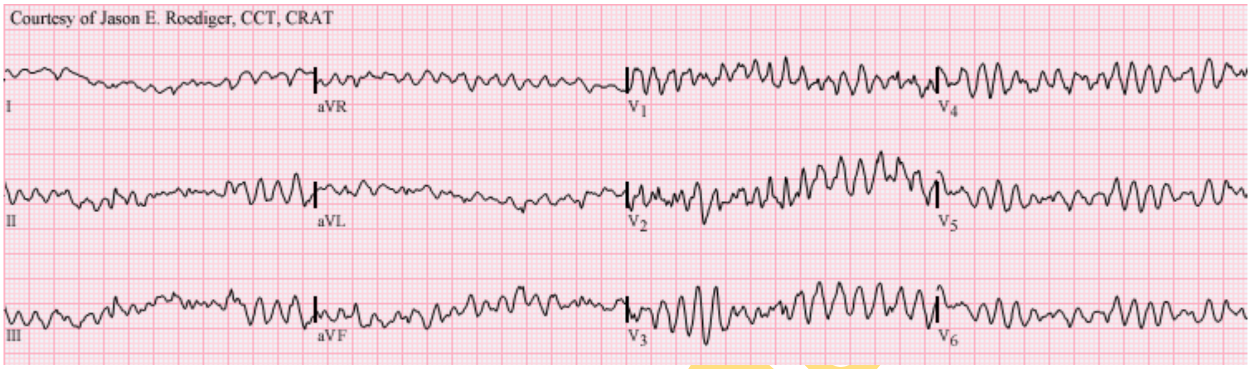
C. Obesity is a risk factor for diabetes

D. Obesity is an independent risk factor for CAD

E. All of the above statements are true

E. All of the above statements are true – Obesity independently contributes to multiple CV risk factors.

15. What is the antiarrhythmic of choice in the management of Ventricular Fibrillation?


Courtesy of Jason E. Roediger, CCT, CRAT

A. Bretylium

B. Lidocaine

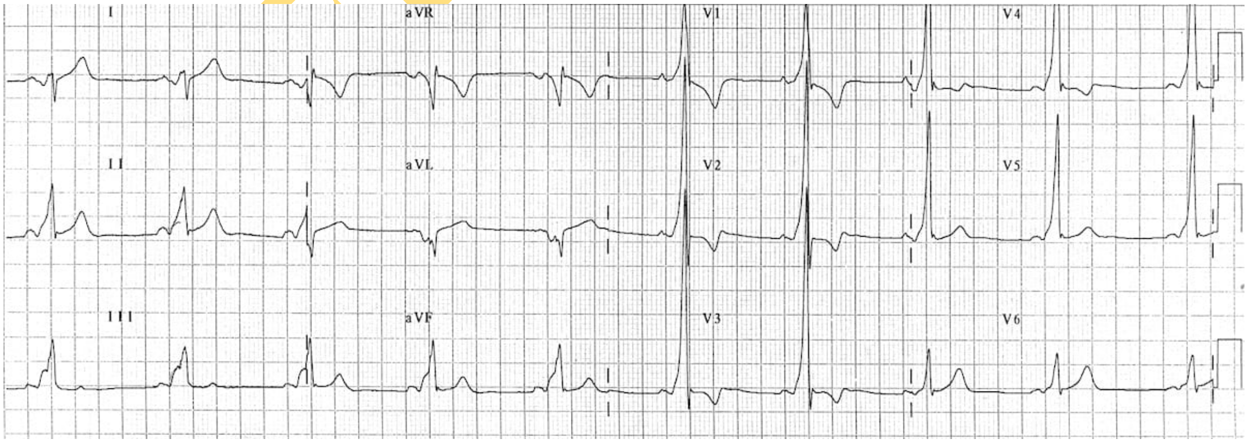
C. Procainamide

D. AED

E. Amiodarone

e. AED is ideally used. Amiodarone/ Ligociane – Antiarrhythmic drug of choice for ventricular fibrillation.

16. A 27 years old university student comes to your clinic and complains of palpitations off and on. He also complains of tremors, lack of sleep and decreased memory. His annual university examination is also coming up soon. His ECG shows.



How would you manage this case in ideal situations?

A. Advise exercise tolerance test

RESO

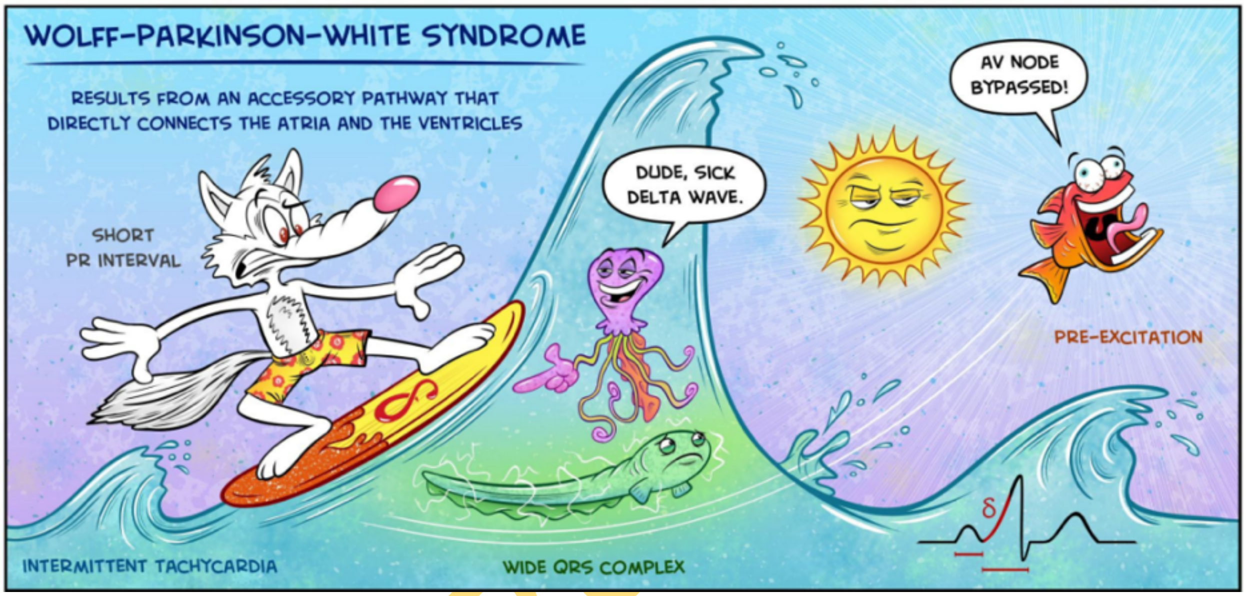
B. Advise 24 hour Holter monitoring

C. Reassure him and council for stress management

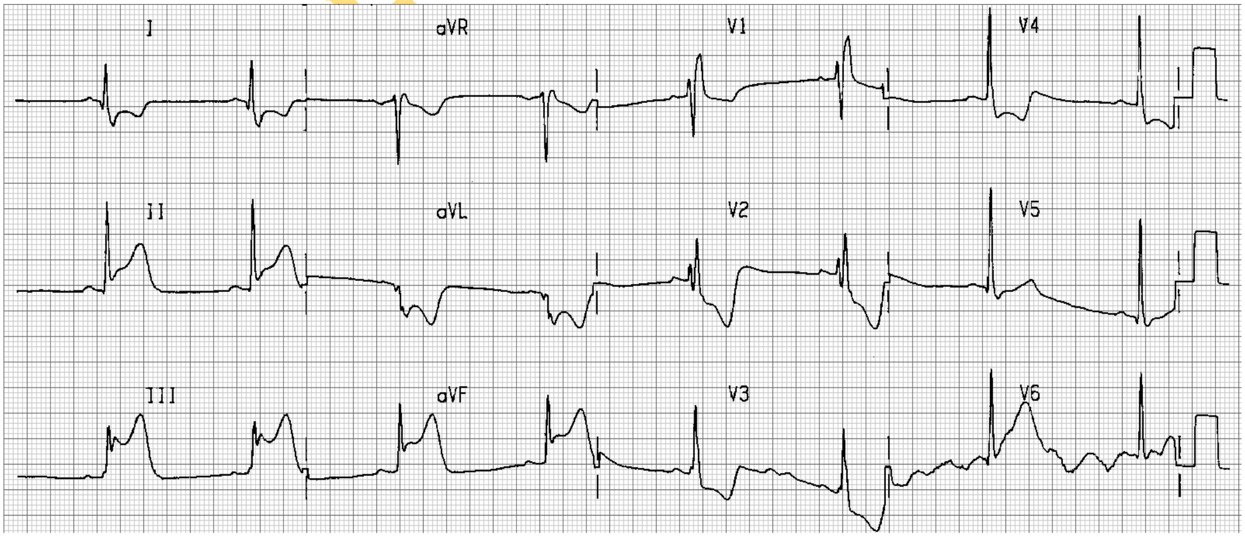
D. Reassure him and start tricyclic antidepressants

E. Refer to a cardiac center for laser ablation of abnormal conduction pathway

e. Wolff-Parkinson-White (WPW) Syndrome is a condition characterized by the presence of an accessory conduction pathway (known as the Bundle of Kent) between the atria and ventricles. This can lead to episodes of tachyarrhythmias due to abnormal electrical conduction. Referral to a cardiac center for laser ablation of abnormal conduction pathway is ideally recommended.


WOLFF-PARKINSON-WHITE SYNDROME
RESULTS FROM AN ACCESSORY PATHWAY THAT DIRECTLY CONNECTS THE ATRIA AND THE VENTRICLES
SHORT PR INTERVAL
DUDE, SICK DELTA WAVE.
AV NODE BYPASSED!
PRE-EXCITATION
δ
INTERMITTENT TACHYCARDIA
WIDE QRS COMPLEX

17. A 45 years man has been brought into your clinic by relatives saying he was watching TV and suddenly started chest pain. His pulse is 100 b/min and BP is 140/90 mm Hg. You have an ECG machine in your clinic. You perform an ECG which shows:


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

How would you manage this patient in your clinic?

A. Give oxygen, morphine and refer

B.Give oxygen and sublingual nitroglycerine

C. Give streptokinase and aspirin

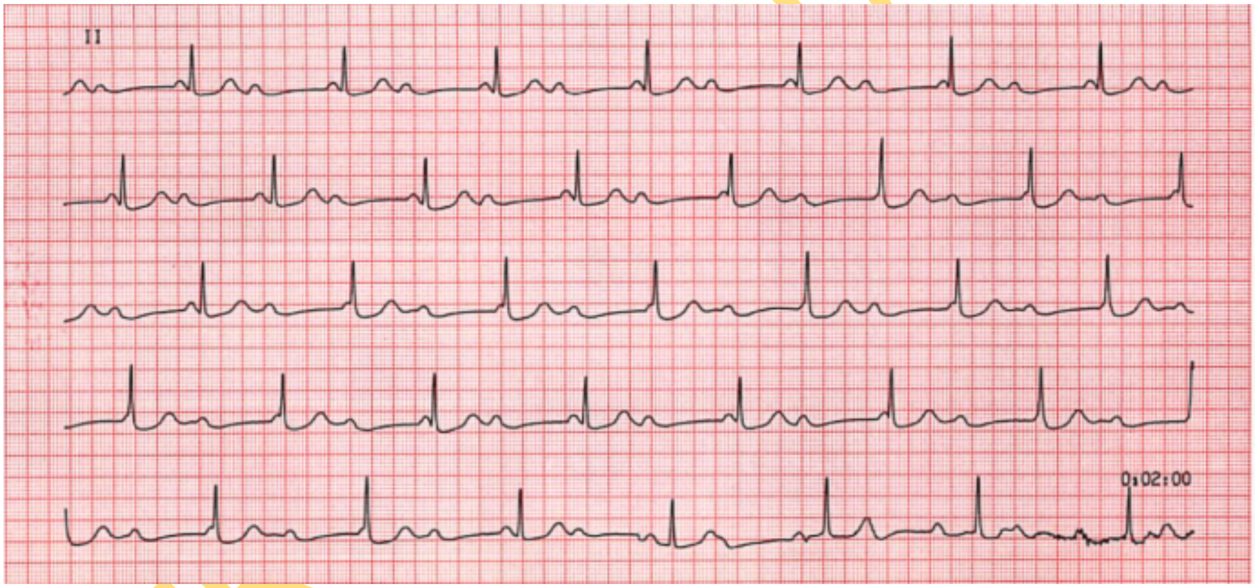
D. Maintain I/V line and give normal saline

E. Give oxygen, aspirin, morphine and refer

e. If attending the patient - (e.g. patient reports chest pain during a same day GP surgery appointment). Call for an emergency ambulance to transfer the patient to hospital then:

- Give pain relief with either sublingual GTN or IV/IM opioid (e.g. morphine 5–10mg—half dose if elderly/frail) or both
- Give aspirin 300mg po (unless contraindicated)
- Consider giving IV/IM antiemetic (e.g. metoclopramide 10mg)
- Measure peripheral oxygen saturation with pulse oximeter—only give oxygen if saturations are <94%. Aim for saturations of 94–98% (88–92% if known hypercapnic respiratory failure and at risk of CO2 retention)
- If bradycardia, consider giving atropine 500 micrograms IV and further doses of 500 micrograms if needed to a maximum of 3mg. OHGP 5th Ed Page 1067

18. A 38 years woman has come for a routine health check up. Her ECG shows:



What is this rhythm?

A. Mobitz type I

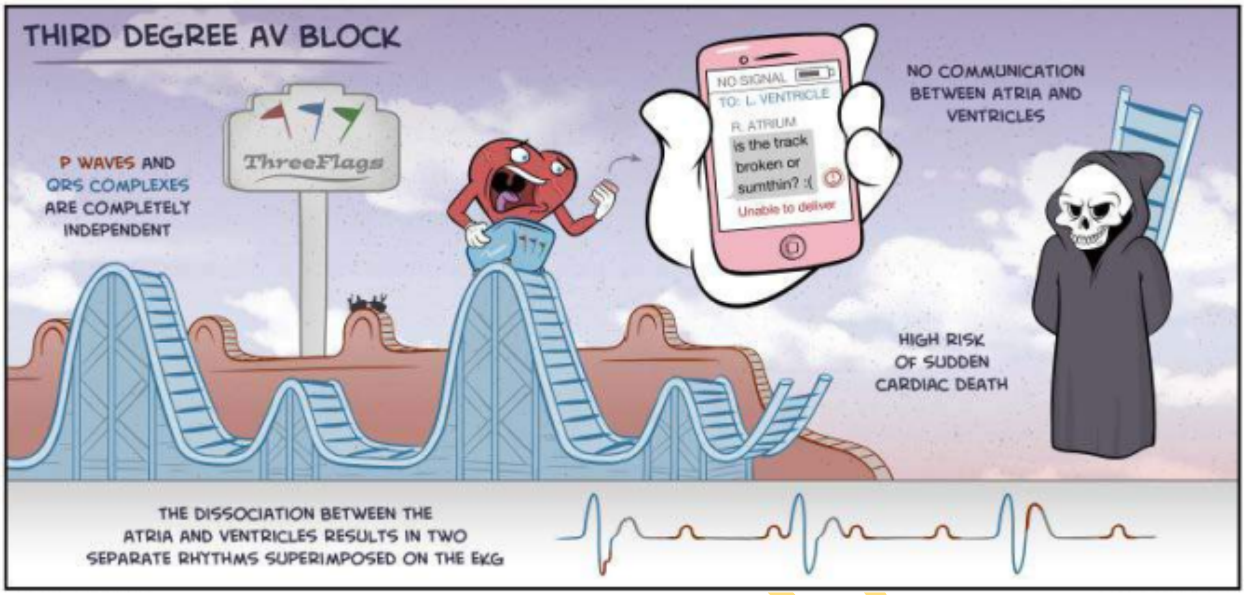
B. Mobitz type II

C. Complete heart block

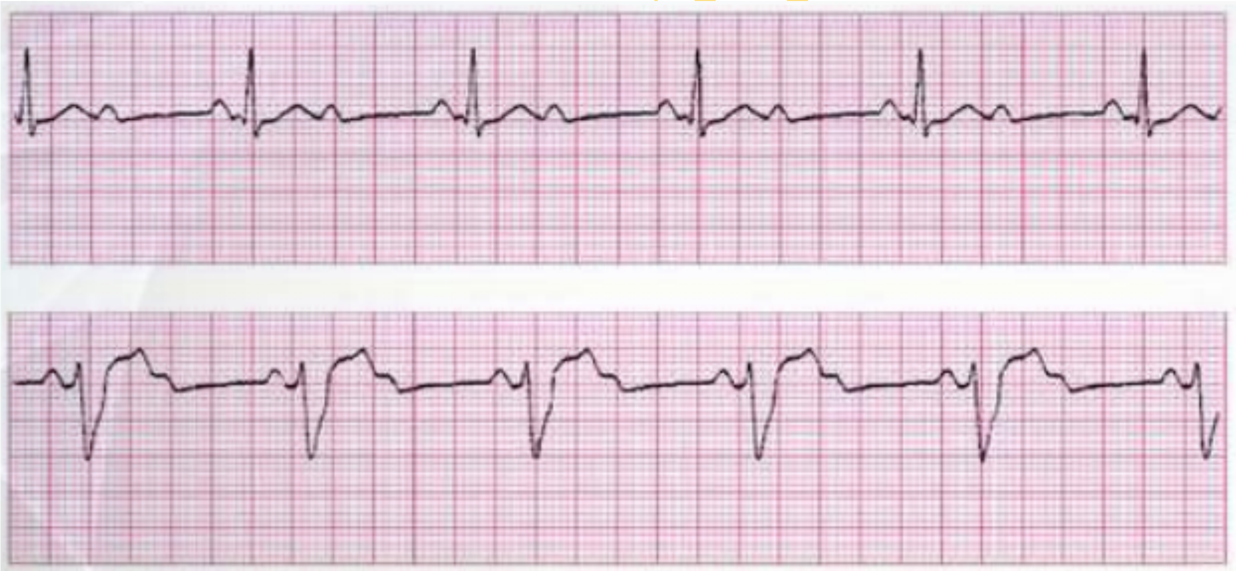
D. First degree heart block

E. Premature ventricular contractions

c. Complete heart block


THIRD DEGREE AV BLOCK
P WAVES AND QRS COMPLEXES ARE COMPLETELY INDEPENDENT
ThreeFlags
NO SIGNAL
TO: L. VENTRICLE
R. ATRIUM
is the track broken or sumthin? :(
Unable to deliver
NO COMMUNICATION BETWEEN ATRIA AND VENTRICLES
HIGH RISK OF SUDDEN CARDIAC DEATH
THE DISSOCIATION BETWEEN THE ATRIA AND VENTRICLES RESULTS IN TWO SEPARATE RHYTHMS SUPERIMPOSED ON THE EKG

19. You have bought a new ECG machine. In order to check it you got the ECG of your dispenser. His ECG shows:



What is the diagnosis in the case?

A. Mobitz type 1

B. Mobitz type II

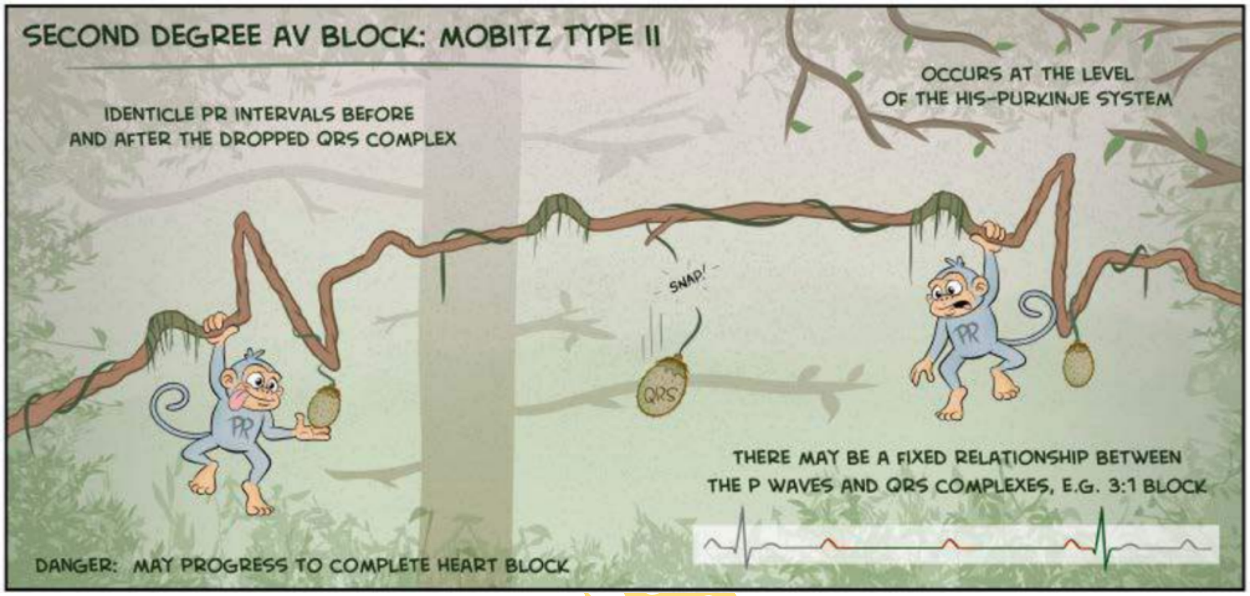
C. Complete heart block

D. First degree heart block

E. Premature ventricular contractions

b. Mobitz type II

- First degree AV heart block just shows prolong PR interval with all conducting P wave.
- Second degree further divided into Type I called Wenceback where you have progressive PR prolongation and a drop beat and second degree type II is one, where you have a drop beat with fix PR.


SECOND DEGREE AV BLOCK: MOBITZ TYPE II
IDENTICLE PR INTERVALS BEFORE AND AFTER THE DROPPED QRS COMPLEX
OCCURS AT THE LEVEL OF THE HIS-PURKINJE SYSTEM
SNAP!
QRS
PR
PR
THERE MAY BE A FIXED RELATIONSHIP BETWEEN THE P WAVES AND QRS COMPLEXES, E.G. 3:1 BLOCK
DANGER: MAY PROGRESS TO COMPLETE HEART BLOCK

FREE RES

20. A 55-year-old man without known heart. disease presents to your office with a recent history of anterior chest pain that comes and goes. His sugar and lipids are normal. His BP is 130/90 mm Hg and ECG is normal. Which one of the following tests would be most appropriate for this patient?

A. Exercise treadmill testing.

B. Coronary angiography.

C. Cardiac magnetic resonance imaging.

D. Pharmacologic stress imaging.

E. None of the above

a. ETT – To rule out ischemic pain

21. A 55-year-old woman who was recently admitted to the hospital for a myocardial infarction presents for follow-up. She reports that she is homeless and that she stays with various friends and relatives and sometimes in shelters. She brings the bag of medications she has been taking since her hospital discharge but says she cannot afford to pay for refills. Most of her money goes toward her one-pack-a-day smoking habit. Which one of the following actions is most appropriate?

A. Prescribe bupropion for smoking cessation.

B. Avoid the topic of smoking because she is too stressed to quit.

C. Advise her not to spend her money on cigarettes.

D. Counsel her about how to reduce the number of cigarettes daily.

d. Counselling regarding to reduce the number of cigarettes daily would be ideal option here.

22. A 45-year-old woman who is obese has well- controlled hypertension and a low-density lipoprotein (LDL) cholesterol level of 110 mg per dL. Which one of the following interventions is most appropriate to reduce her risk of cardiovascular disease?

A. Limitation of saturated fat to less than 10 percent of daily caloric intake.

B.Antioxidant vitamin supplementation.

C. Daily aspirin use.

D. Omega-3 fatty acid supplementation.

a. The 2015–2020 Dietary Guidelines for Americans recommends limiting calories from saturated fats to less than 10% of the total calories you eat and drink each day

23. A 45 years old woman, who has migraine and anxiety, develops hypertension. Her initial work up is unremarkable.

Which one medicine would you choose for her?

A. Thiazide

B. Verapamil

C. Atenolol

D. Lisinopril

E. Felodipine

c. Atenolol – Effective for hypertension with migraines and anxiety.

24. A 45 years old woman patient of asthma develops *hypertension* and *palpitations*. Her pulse is 100 per minute a BP is 150/90 mm Hg. Her initial work up is unremarkable.

Which one medicine would choose for her?

A. Thiazide

B.Verapamil

C.Atenolol

D.Lisinopril

E. Felodipine

b. Verapamil – Safe in asthma; beta blockers (e.g., atenolol) are contraindicated.

25. A *49* years old *diabetic* patient develops high blood pressure. On two different occasions his mm Hg. His BP has been 150/ 90 His investigations for end organ damage are *normal*. He also has asthma since childhood.

Which one medicine would you prescribe to him for blood pressure?

A. Enalapril

B.Metoprolol

C.Hydrochlorthiazide

D.Verapamil

E. Amlodipine

e. According to NICE guidelines, ACEi are 1st choice in diabetics for BP control irrespective of age.

26. A 65 years old man whose BP was previously well controlled on Verapamil presents again with uncontrolled blood pressure. There are no other cardiovascular risk factors. He also complains of difficulty in passing urine.

Which one medicine would you like to add to his prescription?

A. Thiazide diuretic

B.Terazocin

C.Atenolol

D. Lisinopril

E.Felodipine

b. Terazocin – Helps with urinary symptoms and hypertension.

27. A 59 years old man has been referred to you a neurologist for control of hypertension. had a CVA 3 months ago. He is on optimal doses of ACE inhibitor.

Which one medicine would you like to add prescription for prevention of recurrent stroke and control of hypertension?

A. Prazocin

B. Thiazide diuretic

C. Atenolol

D. Diltiazem

E. Methyl Dopa

b. Thiazide diuretic – Adds synergistic BP control with ACE inhibitors, reduces recurrent strokes.

28. A 38 years man who is diabetic and hypertensive develops acute myocardial infarction which is treated in CCU. He is discharged home on oral medicines. Three months later his blood pressure remains above 140/90 mm Hg. He is taking Losartan, Aspirin, insulin and Simvastatin.

Which one medicine would you like to prescribe to him for control of blood pressure?

A. Metoprolol

B. Furosemide

C. Verapamil

D. Alprazocin

E. Amlodipine

a. Metoprolol – Beta blocker for post-MI hypertension.

29. Mr. Malik is your neighbor and has been coming to you home for BP monitoring. He smokes and his family history is also positive for ischemic heart disease. He has normal blood sugar and lipids.

What will be the target BP for him in the light of scientific evidence?

A. 140/90 mmHg

B. 130/90 mmHg

C. 130/80 mmHg

D. 135/85 mmHg

E. 120/80 mmHg

C. 140/90 mmHg – Target BP for a smoker with a positive family history of IHD.

NICE GUIDELINES - 2019

Clinic Blood Pressure Targets for People Aged Under 80

Condition	BP Target
Hypertension (**with or without type 2 diabetes**) or	**<140/90**
Type 1 diabetes plus albumin-to-creatinine ratio (ACR) **< 70 mg/mmol**	**<140/90**
Chronic kidney disease (**CKD**) plus albumin-to-creatinine ratio (ACR) **< 70 mg/mmol**	**<140/90**
Type 1 diabetes plus albumin-to-creatinine ratio (ACR) **≥ 70 mg/mmol**	**<130/80**
Chronic kidney disease (**CKD**) plus albumin-to-creatinine ratio (ACR) **≥ 70 mg/mmol**	**<130/80**

Clinic Blood Pressure Targets for People Aged 80 and Over

Condition	BP Target
Hypertension (**with or without type 2 diabetes**) or	**<150/90**
Type 1 diabetes (regardless of albumin-to-creatinine ratio)	**<150/90**
Chronic kidney disease (**CKD**) plus albumin-to-creatinine ratio (ACR) **< 70 mg/mmol**	**<140/90**
Chronic kidney disease (**CKD**) plus albumin-to-creatinine ratio (ACR) **≥ 70 mg/mmol**	**<130/80**

JNC 8 – Blood Pressure Targets by Age and Condition

Condition	BP Target
General population aged **≥60 years** without diabetes or chronic kidney disease	**<150/90**
General population aged **<60 years** without diabetes or chronic kidney disease	**<140/90**
Adults ≥18 years with chronic kidney disease (**CKD**)	**<140/90**

Adults ≥18 years with **diabetes**	**<140/90 mmHg**

30. Mr. Chaudry is a patient of hypertension. On routine check up his blood sugar was also found high. His blood sugar is now well controlled on medicines.

What maximum BP target would you set for him in order to reduce cardiovascular complications?

A. <140/90 mmHg

B. 130/90 mmHg

C. 130/80 mmHg

D. 135/85 mmHg

E. 120/80 mmHg

C. 140/90 mmHg – Target BP for diabetics to reduce cardiovascular complication

31. Your gynecology colleague has referred a 45 years old hypertensive patient to you for control of BP. She has had HTN since 15 years. Her creatinine is 2.5 mg/d) and proteinuria is present.

What maximum BP target would you like to set for her?

A. <140/90 mmHg

B. 130/90 mmHg

C. 130/80 mmHg

D. 135/85 mmHg

E. 120/80 mmHg

c. According to NICE GUIDELINES:

In adults with CKD and an ACR under 70 mg/mmol, aim for a clinic systolic blood pressure below 140 mmHg (target range 120 to 139 mmHg) and a clinic diastolic blood pressure below 90 mmHg.

In adults with CKD and an ACR of 70 mg/mmol or more, aim for a clinic systolic blood pressure below 130 mmHg (target range 120 to 129 mmHg) and a clinic diastolic blood pressure below 80 mmHg.

Clinic blood pressure targets for people aged under 80:

1. Hypertension (with or without type 2 diabetes) OR Type 1 diabetes plus albumin to creatinine ratio less than 70 mg/mmol OR Chronic kidney disease plus albumin to creatinine ratio less than 70 mg/mmol – **Below 140/90**

3. Type 1 diabetes plus albumin to creatinine ratio of 70 mg/mmol or more OR 2. Chronic kidney disease plus albumin to creatinine ratio of 70 mg/mmol or **more Below 130/80**

32. A 49 years old hypertensive patient visits your clinic with complains of chest heaviness and sweating on climbing to his office on third floor. His symptoms are relieved by taking rest. On examination his blood pressure is 156/90 mmHg and pulse is 88/minutes.

Which single antihypertensive would you prescribe to him?

A. Furosemide

RESOURCE

B. Metoprolol

C. Diltiazem

D. Amlodipine

E. Lisinopril

b. Metoprolol – Beta blockers reduce angina and control BP

33. A 45 years old diabetic woman comes annual health check up. Her clinic examination is normal. You advise un dipstick examination.

Which one of the following is not detected urine dipstick?

A. Ketones

B. Microalbuminuria

C. Bile Pigments

D. Glucose

E. pH of urine

b. Microalbuminuria – Requires more sensitive tests; not detected on routine dipstick

34. Mrs. Jennet, 55 years old lady suffers an acute myocardial infarction. What advice would you give regarding the maximally permissible quantity of alcohol, she may take in future;

A. One unit per day

B. Two units per day

C. Three units per day

D. Four units per day

E. five units per day

b. two unit per day – According to the National Institute for Health and Care Excellence (NICE) guidelines, specific recommendations regarding alcohol consumption after a myocardial infarction (MI) are not explicitly provided. However, general guidance on alcohol intake suggests that both men and women should limit their alcohol consumption to no more than 14 units per week, spread evenly over three or more days.

35. Mr. Khan wishes to fly to London from Lahore to see his relatives. He had an acute MI one week ago and was discharged from the hospital without any complication.
After MI when will you allow him to travel by air?
A. One week

B. Two weeks

C. Four weeks

D. Six weeks

E. Eight weeks

c. Most airlines will not carry passengers for 2wk after MI and then only if able to climb 1 flight of stairs without difficulty. OHGP 5th Ed Page 231

36. Mr. Jalal is 40 years old and has sustained anteroseptal MI one week back. He asks you when he can resume sexual activity after MI. What is the most appropriate answer?

A. One week

B. Two weeks

C. Four weeks

D. Eight weeks

E. Twelve weeks

c. Four weeks – Time required for cardiovascular stability before resuming sexual activity. OHGP 5th Ed Page 231

37. A 45 years old man is discharged from hospital one week after MI on Aspirin, Lisinopril, Atenolol and Simvastatin. Two months later at follow up he complains of erectile dysfunction. He asks you if he can use Viagra (Sildenafil). When can this patient start Sildenafil after MI?
A. Two months

B. Four months

C. Six months

D. Eight months

E. Ten months

c. 6 months – Sildenafil is safe once stable post-MI.

38. A 45 years old man is found to have high levels of serum lipids. You plan to start him on Simvastatin.
Which baseline investigation is necessary before starting the drug?
A. Creatinine

B. Blood Sugar

C. SGPT

D. CPK

E. CBC

c. Recheck lipid profile in 3mo. If target is not met: promote lifestyle measures, check concordance, ↑ dose (if tolerated/not on maximum)

- Check liver function 3mo and 1y after initiating statin/changing dose; do not recheck again unless clinically indicated
- Do not routinely check CK levels—only if muscle pain

SGPT – Liver function must be checked before starting statins. OHGP 5th Ed Page 224

39. A 55 years old man who is using Simvastatin comes for follow up after three months. His cholesterol level has decreased though not normalized. He is completely asymptomatic.
What investigations will you advise on follow up?
A. Total bilirubin

B. Direct bilirubin

C. SGPT

D. Alkaline phosphatase

E. CPK

c. SGPT – Monitor for liver toxicity during statin therapy.

40. A 55 years old woman who has come to your clinic for routine checkup. Her clinical examination and investigations are normal except Atrial fibrillation on ECG. Her ECG 5 years ago also had Atrial fibrillation..
Which of the following is the most significant risk to her?
A. Myocardial infarction

B. Ventricular tachycardia

C. Sudden cardiac death

D. Cerebrovascular accident

E. Ventricular fibrillation

d. Cerebrovascular accident – Most significant risk in patients with chronic atrial fibrillation.

41. Mrs. Nasir a 49 years old woman with chronic heart failure comes for follow up. She is taking optimal doses of Hydrochlorothiazide and Enalapril. She still complains of breathlessness. Her pulse is 80 BPM regular and BP is 130/80 mm Hg. Which one of the following drugs should be added to her prescription?
A. Statins

B. Nitrates

C. Beta blockers

D. Calcium channel blockers

E. Digoxin

c. Beta blockers – Improves symptoms in chronic heart failure.

RESOURCE

HEART FAILURE – PHARAMCOLOGICAL MANAGEMENT

Step	Management
Step 1	• **ACEI or ARB**: If not tolerated, seek specialist advice and consider **Hydralazine + Nitrate** in HFrEF. • **Beta Blockers** (Bisoprolol, Carvedilol, Nebivolol, **not Atenolol**): Start low, go slow. If contraindicated, consider **Ivabradine**.
Step 2	**Mineralocorticoid/Aldosterone Receptor Antagonist** (e.g., Spironolactone) in combination with **ACEI or ARB**. Contraindicated in **CKD Stage 4** or **Serum K+ > 5**.
Step 3	If ongoing symptoms, refer for specialist advice. **Sacubitril/Valsartan**: • **For NYHA Class II - IV** • **For EF ≤ 35%**.
Step 4	• Ivabradine if sinus rhythm & resting **HR > 75 bpm** with **LVEF < 35%**. • **Digoxin** as an add-on for symptomatic patients in **sinus rhythm** on optimal therapy. • **Hydralazine/Isosorbide Dinitrate** if intolerant to **ACEI, ARB, or Sacubitril/Valsartan**. • Consider **Implantable Cardioverter Defibrillator (ICD)**, **Cardiac Resynchronization Therapy (CRT)**, and **Heart Transplantation** in selected patients.

42. A 65 years old man walks in your clinic with complaint of dyspnea and nocturnal cough. His pulse is 98/min and BP is 165/95. He has crackles in the chest.

Which one of the following initial investigations will best exclude heart failure?
A. BUN

B. BNP

C. CK-MB

D. Chest X-ray

E. LDH

b. BNP – Best marker for diagnosing heart failure.
How should I assess a person with suspected chronic heart failure?
Measure their N-terminal pro-B-type natriuretic peptide level (NT- proBNP)

- If the NT-pro-BNP level is above 2000 pg/mL (236 pmol/L), refer urgently for specialist assessment and echocardiography to be seen within 2 weeks.
- If the NT-pro-BNP level is between 400-2000 pg/mL (47-236 pmol/L), refer for specialist assessment and echocardiography to be seen within 6 weeks.
- If NT-pro-BNP is less than 400 pg/mL (47 pmol/L), be aware that a diagnosis of heart failure is less likely.

Be aware that the level of serum natriuretic peptide does not differentiate between heart failure with reduced ejection fraction and heart failure with preserved ejection fraction.

43. A 70 years old man with chronic heart failure comes for routine check up. His symptoms are well controlled.
Which one of the following vaccines is recommended for him in relation to his heart failure?
A. Tetanus

B. Hepatitis B

C. Hemophilus influenza

D. Meningococcal

E. Pneumococcal

e. Pneumococcal – Recommended in patients with chronic heart conditions.

44. A 50 years old non smoker man comes to you with some blood reports. His Blood Pressure is 138/90 mm of Hg, BMI is 27, fasting blood sugar is 111 mg/dl, triglyceride is 198 mg/dL, total Cholesterol is 190 mg/dl.
What is the single best advice for him?
A. Screening for metabolic syndrome.

B. No treatment is needed at this time.

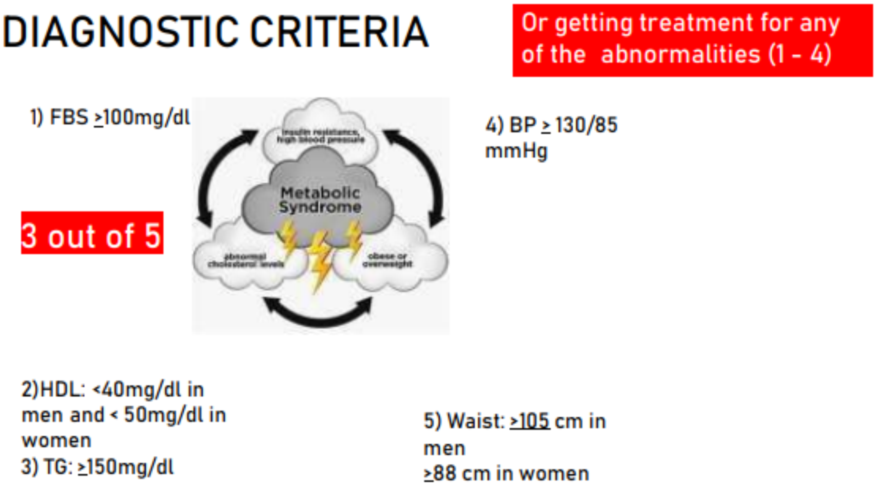
C. He should receive fibrate therapy.

D. He should receive niacin therapy.

E. He should receive statin therapy

FREE RESOU

a. Screening for metabolic syndrome – Meets criteria for possible metabolic syndrome.



DIAGNOSTIC CRITERIA

Or getting treatment for any of the abnormalities (1 - 4)

1) FBS ≥100mg/dl

3 out of 5

4) BP ≥ 130/85 mmHg

2)HDL: <40mg/dl in men and < 50mg/dl in women

3) TG: ≥150mg/dl

5) Waist: ≥105 cm in men

≥88 cm in women

insulin resistance, high blood pressure
Metabolic Syndrome
abnormal cholesterol levels
obese or overweight

45. A 29 year old businessman comes to your clinic with his lipid profile which he got done after sudden death of his relative. His weight is 68 Kg. He loves fatty food. His labs show:
Total Cholesterol - 290 mg/dl LDL Cholesterol = 220 mg/dl HDL Cholesterol
TG Cholesterol
Total lipids
50 mg/dl -540 mg/dl - 1600 mg/dl
What could be the single most likely cause of his lipid profile?

A. Overweight

B. Work stress

C. Sedentary life style

D. Genetic predisposition

E. High fat diet

d. Genetic predisposition – Strong family history likely explains abnormal lipid profile.

46. Mr. Qureshi visits your clinic for treatment of diabetes and hypertension. He complains of nausea and anorexia for 1 month. His SGPT is 240 IU.
Which one of his routine medicines would you like to withhold?

A. Aspirin

B. Enalapril

C. Glimiperide

D. Simvastatin

E. Metformin

d. Simvastatin

d. Simvastatin – Causes liver enzyme elevation; withhold in this patient.

47. Mr. Alamgir is a diabetic, hypertensive patient and his LDL is 150 mg/dl. You started him on Atorvastatin. Six months later he complains of dull pain and weakness in his thighs and buttocks.

Which investigation would you order to confirm his problem?
A. ESR

B. CRP

C. CPK

D. LDH

E. HDL

c. Only measure creatine kinase (CK) level if history of unexplained persistent, generalized muscle pain.

- If CK <5× upper limit of normal, start statin at ↓ dose
- If ≥5× upper limit of normal, recheck after 7d—if still ≥5× upper limit of normal, do not start a statin. OHGP 5th Ed Page 224

48. Mr. Khalid is a 45 years old sports teacher comes to your clinic with sore throat. He does not smoke and family history is negative for coronary artery disease. His LDL cholesterol is 136 mg/dl.
What should be the next appropriate management step?
A. Low dose Statins

B. Life style changes

C. Repeat LDL after 6 months

D. Statins and life style changes

E. No intervention required

e. Although LDL is borderline high, but still no risk factors and no sedentary lifestyle mentioned in scenario that why most likely no intervention required.

49. A 65-year-old hypertensive patient has come to your clinic with angina. His blood pressure is 170/100 mm Hg. Exercise tolerance testing reveals a 2.5-mm ST depression in the lateral chest leads. Echocardiogram reveals apical akinesis and an estimated ejection fraction of 50%. Which of the following is the antihypertensive of first choice for this patient?
A. Hydrochlorothiazide

B. Nifedipine

C. Lisinopril

D. Atenolol

E. Verapamil

d. Indication of β blockers post MI is no contraindication.

50. A 58 year old man presents to your clinic four weeks after being hospitalized for myocardial infarction. He is complaining of chest pain, fever, and multiple joint pains. Laboratory tests do not show an increase in cardiac enzymes.
What is the most likely diagnosis?
A. Dressler's syndrome

B. Costochondritis

C. Pneumonia

D. Recurrent MI

E. Post MI angina

c. Dressler's syndrome develops 2–10wk after MI or heart surgery as a result of autoantibodies to heart muscle. Presents with recurrent fever and chest pain ± pleural and/or pericardial effusion. *Management*: Refer urgently for cardiology advice. Treatment is with steroids and NSAIDs. OHGP 5th Ed Page 231

51. A 35 years old man has come to your clinic from a far off village. He complains of weakness, skin changes and shortness of breath for one year. He has been a heavy alcoholic. His pulse is 110 bpm, BP 135/60 mm Hg, basal crepitation and ankle edema are present.
What is the most likely cause of his symptoms?
A. Ischemic heart disease

B. Beriberi

C. Hypothyroidism

D. Pericardial disease

E. Thyrotoxicosis

b. Beriberi – Alcoholism causing thiamine deficiency and heart failure symptoms. People with chronic alcohol dependence are frequently deficient in vitamins, especially thiamine—give oral thiamine indefinitely (if severe, 200–300mg/d; if mild, 10–25mg/d). During detoxification in the community—give thiamine 200mg od for 5–7d. OHGP 5th Ed Page 160

52. A 64-year-old female comes to your clinic with an ulcer on the anterior aspect of her leg for one month. The skin of her leg is very thin and shiny. She also has severe eczema on her leg. Yesterday she shopped all day and developed severe lower limb edema.
What is the most likely diagnosis?
A. Venous insufficiency

B. Arterial insufficiency

C. Age related changes

D. Peripheral neuropathy

E. Obesity related changes

a. Venous insufficiency – Chronic venous changes lead to ulcers and edema.

53. A 60 year old man has had myocardial infarction. He has symptoms of breathlessness consistent with NYHA class III. Echocardiography shows an LV ejection fraction of 35%. He is taking Metoprolol, Ramipril, Aspirin and Furosemide.
According to NICE Guidelines which one of the following medicines would you add to control his shortness of breath?
A. Valsartan

B. Diltiazem

C. Hydrochlorothiazide

D. Spironolactone

E. Indapamide

d. Spironolactone – Improves survival and symptoms in NYHA Class III heart failure.

54. 40 years old man is found to have Triglyceride level of 550 mg/dl and Cholesterol level of 180 mg/dl. He does not have risk factors for coronary artery disease.

What is the drug of choice for him?
A. Nicotinic acid

B. Gemfibrozil

C. Simvastatin

D. Atorvastatin

E. Ezetimibe

d. Do not offer fibrates, nicotinic acid, bile acid sequestrants, or omega-3 fatty acid for prevention of CVD. Ezetimibe may be used if statin is contraindicated/not tolerated, or combined with low-dose statin to achieve target cholesterol levels. OHGP 5th Ed Page 225

55. A 60 year old patient has cholesterol of 250 mg/dl and triglycerides of 240 mg/dl. His blood pressure is 165/90 mm Hg. He has a previous history of CVA but not myocardial infarction.
Which one of the following is most appropriate?
A. Simvastatin

B. Bezafibrate

C. Gemfibrozil

D. Ezetimibe

E. Cod liver oil

a. Simvastatin – Statins reduce risk of stroke and lower cholesterol.

56. Mr. Kazmi comes to your clinic for respiratory tract infection. His age is 48 years and there is no family history of Ischemic heart disease. His blood pressure and blood sugar are normal. His LDL cholesterol is 150 mg/dl.
How would you classify his cholesterol?
A. Optimal

B. Near optimal

C. Borderline high

D. High

E. Very high

c. Borderline high – LDL between 130–159 mg/dL is borderline high.

- Less than 100 mg/dL – normal/optimal
- 100 to 129 mg/dL – near or above the optimal
- 130 to 159 mg/dL – borderline high.
- 160 to 189 mg/dL – high

https://www.hopkinsmedicine.org/health/treatment-tests-and-therapies/lipid-panel

57. A 56 years old man has come to your clinic for control of blood sugar. He smokes 10 cig/day, walks for 30 minutes every day, his family history is negative for Coronary Artery Disease. His total cholesterol is 175. mg/dl.
What would be the goal LDL level for him?
A. < 100 mg/dl

B. < 110 mg/dl

C.< 130 mg/dl

D. < 160 mg/dl

E. < 180 mg/dl

A. < 100 mg/dL – LDL goal for diabetics or patients with other CV risks.

LDL Goals and Risk Categories

Risk Category	**LDL-C Goal (mmol/L / mg/dL)**	**NHDLC Goal (mmol/L / mg/dL)**
CHD	< 2.27 (100 mg/dL)	< 3.36 (130 mg/dL)
CHD Risk Equivalent (10-year risk > 20%)	< 2.27 (100 mg/dL)	< 3.36 (130 mg/dL)
Multiple (2+) Risk Factors (10-year risk < 20%)	< 3.36 (130 mg/dL)	< 4.14 (160 mg/dL)
0-1 Risk Factor	< 4.14 (160 mg/dL)	< 4.92 (190 mg/dL)

Additional Notes
- NHDLC Goal: Refers to the goal for non-HDL cholesterol levels.
- LDL-C Goal: Refers to the goal for low-density lipoprotein cholesterol levels.
- NHDLC includes all atherogenic lipoprotein particles, including LDL-C, Lp(a), IDL-C, and VLDL-C.
- New NHDLC goal for elevated triglycerides: LDL-C goal + 0.8 mmol/L (30 mg/dL).

CAD Risk Equivalents
- Peripheral arterial disease
- Abdominal aortic aneurysm
- Carotid artery disease
- Transient ischemic attacks or stroke of carotid origin
- Diabetes
- Framingham 10-year CAD risk score of greater than 20%

58. A 60 years old hypertensive brings his reports showing Cholesterol level of 250 mg/dl and Triglyceride of 320 mg/dl. His blood pressure is well controlled on monotherapy.
Which one of the following drugs he might be taking?
A. Diltiazem

B. Lisinopril

C. Atenolol

D. Nifedipine

E. Losartan

C. Atenolol – Beta blockers can increase triglycerides and reduce HDL. Other *Drugs* causing hyperlipidaemia are Steroids, Thiazides, COC pill, Isotretinoin., Antipsychotics, Tamoxifen, Antiretrovirals

59. Mrs. Durrani, a 51 years old housewife discusses her lipid profile with you. Her total cholesterol is 236 mg/dl and HDL is 62 mg/dl. She does not smoke. Her brother died at the age of 39 years because of ac What should be the target LDL goal for her myocardial infarction.?
A. < 100 mg/dl

FREE

B. <110 mg/dl

C. < 130 mg/dl

D. < 160 mg/dl

E. < 180 mg/dl

d. < 160 mg/dL – Although there is a family history of premature CVD (< 45 years in males and < 55 years in females in first degree relatives – mother, father, brother, sister) but since her HDL cholesterol is more than 60 mg/dl which is cardio protective and hence negates this factor.

60. Mr. Khan is a 48 years old executive secretary in a bank. He underwent bypass surgery last year. coronary
What should be his goal LDL level?
A. <100 mg/dl

B.< 110 mg/dl

C. <130 mg/dl

D.< 160 mg/dl

E. < 180 mg/dl

a. < 100 mg/dL – post-bypass surgery LDL target.

61. Mrs. Alvi is your old patient of diabetes This year her routine labs were done. Her LDL cholesterol is 129 mg/dl. What should be her goal LDL level?
A. < 100 mg/dl

B. <110 mg/dl

C. < 130 mg/dl

D. < 160 mg/dl

E. < 180 mg/dl

a. < 100 mg/dL – Target for diabetic patients.

62. Mrs. Wazir is a known case of Mitral Stenosis. She does not have history of diabetes and hypertension. Her family history is unremarkable. What should be her goal LDL level?

A. <100 mg/dl

B. < 110 mg/dl

C. < 130 mg/dl

D. < 160 mg/dl

E. < 180 mg/dl

d. Since Mitral Stenosis is not a risk factor for developing CAD and this patient does not have any risk factor, the cut-off point for starting Statins is 160 mg/dl

63. A 65 years old man with diabetes and hypertension complaints of chest pain. He has loud injection systolic murmur. His ECG shows (LBBB) what is the most appropriate initial diagnostic test for him?
A. Angiography

B. Transesophageal echocardiogram

C. Stress echocardiogram

D. Exercise ECG (ETT)

E. Cardiac Enzyme

e. Cardiac Enzyme indicated if an acute coronary syndrome (ACS) is suspected, the case most likely suggests Aortic Stenosis.

ENDOCRINOLOGY

1. A 40 years male brings his blood report showing fasting blood sugar *113mg/dl.* He does not have any symptoms.

He falls into which of the following Categories?

A. Confirmed Diabetes Mellites

B. Impaired Fasting Glucose

C. Impaired Glucose Tolerance

D. Low Chance of Diabetes

E. Normal Fasting

b. According to (NICE Guidelines), Fasting blood glucose levels between 100-125 mg/dL indicate *Impaired Fasting Glucose (IFG)*, which is a category of prediabetes. This is not diagnostic of diabetes, but the patient is at increased risk of developing type 2 diabetes. Lifestyle modifications (diet and exercise) are recommended to reduce progression risk.

2. A 20 years female patient of diabetes who is on regular insulin presents to emergency room with confusion, palpitation, weakness, sweating and tremors.

Which one of the following drugs you would advise?

A. Alprazolam

B. B complex

C. Dextrose

D. Normal saline

E. Propranolol

c. The symptoms described (confusion, palpitation, weakness, sweating, tremors) indicate hypoglycemia, a common complication in diabetic patients on insulin therapy. Intravenous dextrose is the treatment of choice in severe hypoglycemia to rapidly restore blood glucose levels.

3. A 40 years female patient comes for routine checkup. She has waist circumference of 100cm. Her B.P is 148/90 mm of Hg and fasting blood sugar is 118 mg/dl. Which other test would you like to order to make the diagnosis of syndrome x?

A. Total Cholesterol

B. HBA1C

C. SGPT

D. VLDL

E. Triglycerides & BMI

e. Syndrome X, or metabolic syndrome, is diagnosed based on:

- Truncal obesity—waist circumference >0.9m (Females); >1.0m (Males)—subtract 0.1m from these figures for people of South Asian extraction
- ↑ BP >135/80mmHg
- Dyslipidaemia—serum HDL <1.2.mmol/L (Females) or <1.0 (Males); fasting serum triglycerides >1.8mmol/L

4. A 45 years old diabetic patient comes with occasional attacks of hypoglycemia. His BP is 120/ 78 mm Hg and BMI is 28 Kg/M2. He is taking glibenclamide 5mg daily.

Which is the single most appropriate treatment for him?

A. Acarbose

B. Gliclazide

C. Lente Insulin

D. Metformin

E. Pioglitazone

a. Metformin is the first-line treatment for type 2 diabetes, particularly in overweight patients (BMI ≥ 25 kg/m²). It does not cause hypoglycemia and is safer compared to sulfonylureas like glibenclamide, which are associated with hypoglycemic episodes. Transitioning to metformin can effectively control blood glucose without the risk of hypoglycemia.

5. A sales representative is having an *irregular meal schedule* and history of frequent traveling comes to you for the control of blood sugar. At present he is taking metformin, but still has high blood sugar. From the following which one is the appropriate drug for him?

A. Acarbose

B. Glibenclamide

C. Insulin

D. Pioglitazone

E. Repaglinide

e. Repaglinide, a short-acting meglitinide, Stimulate insulin release. Rapid onset and short duration of activity. Take ½ h before meals. Avoid if aged >75y. Hypoglycaemia is a common side effect. Warn about need for blood glucose monitoring if driver. OHGP 5th Ed Page 321

sulfonylurea is not recommended because of individual's irregular meal schedule and there is risk of hypoglycemia with sulfonylureas.

Pioglitazone are from group of drugs called Thiozolidinediones, which cause fluid retention, and keeping in view the frequent travelling history of individual and irregular eating habits, these can further cause weight gain.

6. A 40 years male patient brings his blood report showing: Blood sugar fasting 130mg/dl, Blood sugar random 210mg. HBAIC=8%.

According to NICE guidelines which one of the following is the *best test for monitoring*?

A. Fasting blood sugar

B. Glycosylated Hb

C. Glucose Tolerance test

D. Early morning urine sugar

E. 2 hrs post prandial sugar

b. HbA1c is the gold standard for monitoring long-term glucose control in diabetes, as it reflects average blood glucose levels over the past 2–3 months. NICE recommends using HbA1c for both diagnosis (≥6.5%) and monitoring glycemic control.

7. A 55 years old male brings his blood report showing BSR 280mg/dl, HbA1C - 8.1%. He is taking metformin for the last two months. Which one of the following drugs you would add now?

A. Acarbose

B. Exenatide

C. Glibenclamide

D. Insulin

E. Pioglitazone

b. If Blood sugar is not controlled on Metformin, Sulfonylureas should be added, these augment insulin secretion; only effective if some endogenous insulin production. All are equally effective. Advise to take before meals—warn about hypoglycaemia if meals are omitted and need for blood monitoring if driver. Start at minimum dose and ↑ until blood sugar is controlled/maximum dose is reached. Wait ≥1mo between adjustments. Main side effect is weight ↑.

Although, according to latest guidelines, SGLT-2 inhibitors (Gliflozins are 1st choice after metformin due to their overall mortality benefit), so if given in options, these should be 1st choice after Metformin

RESOU

8. A 60 years old woman brings her blood reports showing BSR-220mg/dl, HbA1c =8%. Her BMI is 30 Kg/M2. She is daily taking Metformin 3g and Glibenclamide 20 mg daily. What is the next most appropriate step?

A. Acarbose

B. Exenatide

C. Pioglitazone

D. Gliclizide

E. Glipizide

b. GLP-1 mimetics e.g. exenatide, liraglutide, lixisenatide. ↑ insulin secretion, ↓glucagon secretion, and slow gastric emptying. Consider with metformin + sulfonylurea if triple therapy has failed and weight ↓might benefit other co-morbidities, BMI ≥35kg/m2 or BMI <35kg/m2but insulin treatment would have significant occupational implications. May cause hypoglycaemia—warn about the need for blood glucose monitoring if driver. Avoid if eGFR <30mL/min/1.73m2(<50 for some MR preparations). Continue after 6mo only if HbA1c has ↓ >11mmol/mol and weight ↓ is >3% of initial body weight. Rarely associated with ketoacidosis and pancreatitis. OHGP 5th Ed Page 321

9. A 55 years old male presents with his blood report showing following BSF-240mg/dl, HBA1C-10%. His BMI is 20Kg/m^2. He is taking life style modification measures for the last 3 months.

What is the most appropriate drug for him?

A. Acarbose

B. Exenatide

C. Glibenclamide

D. Metformin

E. Pioglitazone

c. Sulfonylureas may help in some lean diabetics. As it causes weight gain.

10. A 52 years male brings his blood report showing BSR-300mg/dl, HbA1C-7.9%. He is taking pioglitazone (45mg) Glibenclamide and metformin (3g). According to 'NICE' guidelines from the following what is best for him?

A. Continue same and add Insulin

B. Stop all and start insulin

C. Replace Pioglitazone with insulin

D. Replace Metformin with insulin

E. Replace Glibenclamide with insulin

c. Patient is on triple therapy (Metformin + Pioglitazone + Glibenclamide) but still has high blood sugar (BSR 300 mg/dL, HbA1c 7.9%). Pioglitazone is less effective at this stage, and insulin is the recommended next step when triple therapy fails.

Pioglitazone can cause weight gain, fluid retention, and heart failure risk, making it a less favorable option. Insulin is preferred over Pioglitazone in patients with persistently high blood glucose despite oral therapy. Pioglitazone is insulin secretagogue, adding insulin in patient already taking pioglitazone will cause dangerous hypoglycemia.

11. A 48 years old patient of diabetes mellitus presents with B.P 160/100 mmHg. He is taking captopril.

From the following what would you add?

A. Atenolol

B. Doxazocin

C. Hydrochlorothiazide

D. Losartan

E. Spironolactone

c. In diabetes with hypertension (≥140/90 mmHg) despite ACE inhibitor (Captopril), the next step is to add a thiazide-like diuretic (Hydrochlorothiazide or Indapamide) to further lower blood pressure and reduce cardiovascular risk.

12. A 60-year-old male with type 2 diabetes for 2 years presents for a routine checkup. His BP is 140/90 mmHg, and his urine albumin excretion is 200 mg/24h (proteinuria).

According to NICE guidelines, which of the following is the most appropriate first-line treatment for his condition?

A. Amlodipine

B. Indapamide

C. Losartan

D. Metoprolol

E. Ramipril

e. Diabetes + Hypertension (140/90 mmHg) + Proteinuria (200 mg/24h) indicates chronic kidney disease (CKD) with albuminuria.

ACE inhibitors (e.g., Ramipril) are first-line for BP control and kidney protection in diabetes with proteinuria.

If ACE inhibitors are not tolerated (e.g., due to cough), ARBs (e.g., Losartan) should be used instead.

13. A 65 years old male is having diabetes mellitus for the last 15 years, complains of severe burning sensation in his feet. He is unable to sleep due to this pain. According to 'NICE' guidelines which of the following is the most appropriate initial drug?

A. Amitriptyline

B. Carbamazepine

C. Duloxetine

D. Gabapentin

E. Mecobalamin

c. Duloxetine (Cymbalta) and pregabalin (Lyrica) are first-line agents for the treatment of painful diabetic peripheral neuropathy; amitriptyline and gabapentin are considered alternative first-line agents because they have more adverse effects.

https://www.aafp.org/pubs/afp/issues/2024/0700/afp-clinical-answers.html

Amitriptyline causes more sedation, dizziness, and anticholinergic side effects (dry mouth, constipation, urinary retention), which can be problematic in elderly patients (this patient is 65 years old). TCAs also have a higher risk of cardiovascular side effects (QT prolongation, arrhythmias), which is a concern in older diabetic patients who may have cardiovascular disease.

Alternative options: If Duloxetine is not tolerated, Amitriptyline or Gabapentin can be considered.

14. A 49 years male patient of diabetes mellitus is taking glibenclamide and pioglitazone. Pioglitazone is likely to produce which one of the following?

A. Dyspepsia

B. Dyslipidemia

C. Fluid retention

D. Hypertension

E. Hypoglycemia

c. Pioglitazone can cause fluid retention, leading to peripheral edema and increased heart failure risk. It should be used cautiously in patients with heart disease or risk of fluid overload. Regular monitoring for weight gain and edema is advised. It is Contraindicated in HF & Bladder Ca.

15. A 50 years old male brings his blood sugar report of 250mg/dl. Previously his blood sugar was always normal. When will you perform his eye screening?

A. Immediately

B. 3 months

C. 6 months

D. 12 months

E. 18 months

a. Digital retinal photography is available throughout the UK. Ensure patients are referred early for retinal screening (<3mo after diagnosis) and are screened ≥1×/y to detect retinopathy before visual loss occurs. OHGP 5th Ed Page 328

16. A 55 years old male patient of uncontrolled diabetes presents with abdominal bloating and indigestion. He has history of falls and sexual weakness. You will treat him with which of the following drugs

A. Amoxicillin

B. Cephradine

C. Ciprofloxacin

D. Metoclopramide

E. Metronidazole

d. The patient has diabetic autonomic neuropathy, causing gastroparesis (bloating, indigestion), postural instability (falls), and erectile dysfunction. Metoclopramide is the preferred treatment as it enhances gastric motility and relieves bloating. Long-term use should be monitored due to the risk of extrapyramidal side effects.

17. An 18 years old boy has been brought to your clinic by his mother because of *vomiting* since 3 days. He also complains of upper *abdominal pain.* He has *lost 8 Kg weight* in the last 2 week. His intake of water is *adequate and is passing clear urine frequently*. There is *no* history of fever or diarrhea. On examination his:

Pulse 130/min

BP 130/90 mm Hg

Resp rate 32/min

Temp 98.8˚ F

What is the most likely cause for his condition?

A. Acute gastroenteritis

B. Intracranial mass

C. Urinary tract infection

D. Acute viral hepatitis

E. Diabetic ketoacidosis

e. The patient is an 18-year-old with vomiting, rapid weight loss, tachycardia (130/min), tachypnea (32/min), and frequent urination, suggesting new-onset type 1 diabetes with ketoacidosis (DKA). The presence of abdominal pain, dehydration, and deep breathing (Kussmaul respiration) further supports this diagnosis. DKA is a medical emergency requiring urgent fluid resuscitation, insulin therapy, and electrolyte correction.

18. A 39 years woman presents with 2 months. history of weakness, weight loss, anorexia, abdominal pain. Her complexion is also Skin darkening. Her pulse is 110/ min, BP 90/60 mm Hg. Rest of examination unremarkable. What could be the possible causes in this?

A. Diabetes mellitus

B. Hyperthyroidism

C. Pulmonary tuberculosis

D. Adrenal insufficiency

E. Intestinal cancer

d. The patient has weight loss, weakness, anorexia, abdominal pain, skin hyperpigmentation, hypotension (90/60 mmHg), and tachycardia (110/min), which are classic signs of adrenal insufficiency (Addison's disease). The skin darkening is due to excess ACTH stimulating melanocytes. Initial test is 9 a.m. cortisol levels and confirmation with short Synacthen (ACTH stimulation) test. Refer to endocrinology, urgency depends on clinical state. Treatment usually involves replacing deficient steroids with hydrocortisone and fludrocortisone. OHGP 5th Ed Page 339

19. A 60 year old woman presents to a physician complaining of a swelling in her neck. Her past medical history is significant for rheumatoid arthritis and Sjogren's syndrome. Physical examination reveals a mildly nodular, firm, rubbery goiter. Her T4 is reduced, TSH is elevated and *Antithyroid antibodies* are raised. Which of the following is the most likely diagnosis?

A. Euthyroid sick syndrome

B. Graves' disease

C. Hashimoto thyroiditis

D. Acute thyroiditis

E. Subacute thyroiditis

c. The patient has hypothyroidism (low T4, high TSH) with a firm, nodular goiter and positive antithyroid antibodies, strongly suggesting Hashimoto's thyroiditis (chronic autoimmune thyroiditis). Her history of rheumatoid arthritis and Sjögren's syndrome increases the risk of autoimmune thyroid disease. Hashimoto's is the most common cause of hypothyroidism and is managed with lifelong levothyroxine replacement.

20. A patient of 42 years presents with 5 days history of malaise, fever and painful thyroid. He had respiratory tract infection 2 weeks ago. His thyroid is enlarged and tender. He has palpitation, sweating, tremors. His pulse is 130/min.

What is your most probable diagnosis?

A. Hashimoto's thyroiditis

B. De-Quervain's thyroiditis

C. Reidel's thyroiditis

D. Lymphocytic thyroiditis

E. Granulomatous thyroiditis

b. *De Quervain's thyroiditis*: inflammation due to viral infection—usually Coxsackie virus. Acutely swollen, tender thyroid gland and transient thyrotoxicosis often preceded by sore throat/malaise. Settles spontaneously.Management includes NSAIDs or corticosteroids for pain and inflammation. OHGP 5th Ed Page 333

21. A female patient of 35years presents with a 3 cm^2 non tender swelling in right side of thyroid. Her pulse is 120 /min. Her TSH is 0.2 mIU/L. (0.4-5.0) and T4 is 24 pmole/L (8-22). What is the most appropriate diagnosis?

A. Physiological goiter

B. Multinodular goiter

C. Follicular carcinoma

D. Thyroid adenoma

E. Hashimoto's thyroiditis

d. The patient has a solitary, non-tender thyroid nodule with suppressed TSH (0.2 mIU/L) and elevated T4 (24 pmol/L), suggesting an autonomously functioning thyroid adenoma (toxic adenoma). Thyroid adenomas can produce excess thyroid hormones, leading to hyperthyroidism. Diagnosis is confirmed with thyroid ultrasound and radionuclide scan (hot nodule). Treatment options include radioiodine therapy or surgical excision.

22. You want to develop a screening program for hypothyroidism. Which patients you will NOT include in screening?

A. Hypercholesterolemia

B. Infertility

C. Depression

D. Multiple sclerosis

E. Other Autoimmune Diseases

d. Screening for hypothyroidism: Check TFTs in patients:

- With persistent symptoms of tiredness/lethargy without clear cause
- On amiodarone or with a history of Radioactive iodine (^{131}I) administration
- With hypercholesterolaemia, infertility, Turner's syndrome, depression, dementia, obesity, DM, or other autoimmune disease. OHGP 5th Ed Page 335

23. A pregnant woman comes with palpitation excessive sweating, heat intolerance and emotional liability. She is loosing weight despite increased appetite. Her TSH is 0.2 mIU/L (0.45.0) and T4 is 28 pmole/L. (8- 22). What is the single most appropriate treatment?

A. Carbimazole

B. Thyroidectomy

C. Propylthiouracil

D. Ablative therapy

E. Wait till delivery

c. The patient has hyperthyroidism in pregnancy (low TSH, high T4), likely due to Graves' disease. Propylthiouracil (PTU) is preferred in the first trimester due to a lower risk of teratogenicity. Carbimazole can be used after the first trimester. Radioactive iodine (ablative therapy) and thyroidectomy are contraindicated during pregnancy.

24. 42 years female patient presents with amenorrhea, tremors and frequent bowel movements. Her skin is warm and moist and her eyes are protruding outwards. Her TSH is <0.01 mIU/L (0.4 5.0) and T4 is 26 pmol/L (8-22).

Which is most specific test you will advise to diagnose her condition?

A. Thyroid stimulating Immunoglobulin (TSI)

B. Antithyroglobulin antibodies

C. Thyroid ultrasound

D. Thyroid scan

E. Fine needle aspiration

a. The patient has hyperthyroidism with ophthalmopathy (exophthalmos), tremors, warm moist skin, and low TSH, which strongly suggests Graves' disease. Thyroid Stimulating Immunoglobulin (TSI) is the most specific test for confirming Graves' disease, as it directly indicates autoimmune stimulation of the thyroid.

25. A patient comes for a pre employment check up. His lab reports show

Serum Calcium ↑

Serum Albumin ↑

Normal Blood Urea

What could be the cause for his hypercalcemia?

A. Primary hyperparathyroidism

B. Tertiary hyperparathyroidism

C. Cuffed blood specimen

D. Familial benign hypocalcemia

E. Milk alkali Syndrome

URCE

c. A falsely elevated calcium level can result from prolonged tourniquet application (cuffed blood specimen) during blood collection, leading to hemoconcentration and increased total calcium levels. Since serum albumin is also elevated and blood urea is normal, true hypercalcemia is unlikely. Ionized calcium measurement should be done to confirm hypercalcemia. In true Hypercalcemia, albumin is usually normal or low, if both high values specimen is either cuffed or there is severe dehydration due to hemoconcentration. So, always check corrected or ionized calcium by (Corrected Calcium=Measured Calcium+0.8×(4−Albumin)) before diagnosing hypercalcemia. Table below summarizes this.

RELATIONSHIP BETWEEN CALCIUM AND ALBUMIN LEVELS

Serum Calcium	Serum Albumin	Corrected Calcium Status	Possible Causes
↑ High	↑ High	Normal (Pseudohypercalcemia)	Cuffed blood specimen, dehydration
↑ High	Normal	True Hypercalcemia	Primary hyperparathyroidism, malignancy, Vitamin D toxicity, Sarcoidosis
↑ High	↓ Low	Mild hypercalcemia (Requires correction)	Primary hyperparathyroidism, malignancy
↓ Low	↑ High	Normal (Pseudohypocalcemia)	Lab artifact, Hypergammaglobulinemia (e.g., multiple myeloma)
↓ Low	Normal	True Hypocalcemia	Hypoparathyroidism, Vitamin D deficiency, Renal failure

↓ Low	↓ Low	Severe Hypocalcemia (Needs correction)	Nephrotic syndrome, Liver disease, Malnutrition

26. A 42 years old female presents with lethargy, low mood, abdominal pain, constipation, excessive thirst, increased urination and renal stones formation.

What is the most appropriate diagnosis?

A. Primary hyperparathyroidism

B. Secondary hyperparathyroidism

C. Tertiary hyperparathyroidism

D. Familial hyperparathyroidism

E. Chronic renal failure

a. The patient presents with fatigue, low mood, constipation, polydipsia, polyuria, and renal stones, which are classic features of hypercalcemia. Primary hyperparathyroidism is the most common cause, due to excessive parathyroid hormone (PTH) secretion, leading to increased calcium levels and kidney stone formation. Diagnosis is confirmed by elevated serum calcium and inappropriately high PTH levels.

HYPERPARATHYROIDISM

	Calcium	PTH	Vitamin D	Phosphate
Primary Hyperparathyroidism	↑	↑	→	↓
Secondary Hyperparathyroidism	↓ or →	↑	↓	↑
Tertiary Hyperparathyroidism	↑	↑↑	→	↑
Key: ↑ = Elevated ↓ = Decreased → = Normal				

27. A 30 years old female presents with moon shaped face, buffalo hump and truncal obesity. Her physical exam shows increased blood pressure, easy bruising, acne and hirsutisun. What is the single most specific confirmatory test for her condition?

A. Dexamethasone suppression test

B. Serum cortisol level

C. 24 hour urine cortisol

D. Serum ACTH level

E. Urinary catecholamine

c. The patient has Cushing's syndrome, characterized by moon face, buffalo hump, truncal obesity, hypertension, easy bruising, acne, and hirsutism. The most specific confirmatory test is the 24 hour urine cortisol. Initial test is Dexamethasone suppression test.

28. A 40 years old man who is diabetic for 6 years comes for routine checkup. His HbA1c is 6.4%. His creatinine is 0.9 mg/dl and urinalysis show no proteins. What is the next most appropriate step regarding his renal care?

A. Repeat urinalysis after 3 months

B. 24 hours urine for proteins

C. Ultrasound KUB

D. Renal biopsy

E. Urinary creatinine levels

b. The next most appropriate step regarding the renal care of this 40-year-old man with a 61-year history of diabetes is to perform a spot urine albumin/creatinine ratio test. This test is recommended as the first-line annual screening test for diabetic nephropathy in most persons with diabetes. However, option B (24 hours urine for proteins) is the closest, as it's another method to assess proteinuria

29. A 60 years old diabetic comes for routine checkup. His fundoscopy shows micro aneurysms, blot hemorrhages and cotton wool spots. What is the most appropriate diagnosis?

A. Pre- Proliferative retinopathy

B. Non-proliferative retinopathy

C. Proliferative retinopathy

D. Retinal hemorrhage

E. Ischemic maculopathy

a. Cotton wool spots appear in "Pre-Proliferative" (Severe NPDR) and not in early mild NPDR. If extensive, they suggest progression toward proliferative retinopathy.

Non-Proliferative vs Pre-Proliferative vs Proliferative Diabetic Retinopathy

Non-Proliferative (NPDR)	Pre-Proliferative	Proliferative (PDR)
• Microaneurysms • Dot Hemorrhages • Hard Exudates	• Blot Hemorrhages • Cotton Wool Spots • Venous Beading • Intraretinal Microvascular Abnormalities (IRMA)	• Neovascularization • Vitreous Hemorrhage • Retinal Detachment

30. A 34 years old man comes with 5 months history of headache. He has difficulty in driving because he cannot see sideways traffic. He also says that his wedding ring is not fitting in his finger any more. What is the single most appropriate specific diagnostic test for him?

A. CT scan brain

B. MRI brain

C. Carotid Artery Doppler

D. Thyroid function tests

E. Fasting blood sugar

b. The patient has headache, bitemporal hemianopia (loss of peripheral vision), and enlarged fingers (suggesting acromegaly). This is highly suggestive of a pituitary adenoma, most likely a growth hormone-secreting tumor. MRI Brain is the most specific diagnostic test to evaluate for a pituitary tumor and assess its size and effect on surrounding structures

PULMONOLOGY

1. A 63 years old chronic smoker presents with three months history of hemoptysis and weight loss
Which of the following is most appropriate initial investigation?

A. Complete blood count

B. Chest radiograph

C. Sputum for AFB stains

D. Sputum for cultures

E CT scan of chest

b. In a chronic smoker with hemoptysis and weight loss, the most appropriate initial investigation is a chest radiograph (X-ray) to assess for lung pathology such as a mass, infection, or other abnormalities. Further investigations (e.g., CT scan, sputum analysis) depend on the findings from the chest X-ray.

2. A 27-year-old patient presents with mild shortness of breath with wheezing twice a month. His symptoms are worse during winter season and taking exercise.
Which of the following medications is indicated in the initial treatment of this case?

A. Salmeterol

B. Salbutamol

C. Cromoglycate

D. Ipratropium

E. Theophylline

b. This patient has intermittent asthma, with symptoms occurring twice a month, triggered by exercise and cold weather. The initial treatment is a short-acting beta-2 agonist (SABA) like salbutamol to provide rapid relief of bronchoconstriction during symptomatic episodes. Other options like long-acting beta-agonists (e.g., salmeterol) or controller medications are not first-line for mild intermittent symptoms.

3. A 32 years old asthmatic patient is taking medications for his asthma. He presents with hoarseness of voice. Which one of his medicines is most likely responsible for his hoarseness?

A. Montelukast

B. Salbutamol

C. Beclomethasone

D. Ipratropium

E. Theophylline

c. Hoarseness of voice (dysphonia) is a common side effect of inhaled corticosteroids like beclomethasone, due to their local effects on the vocal cords and throat. This can be minimized by using a spacer device and rinsing the mouth after inhalation. Other medications listed are not commonly associated with this side effect.

4. You advise home peak flow meter to an asthmatic patient. Which one of the following statements is incorrect about peak flow meter?

A. A good measure of airflow limitation

B. Best for monitoring of disease progression

C. The best of three attempts is recorded

D. It is a simple to use and cheap test

E. It tends to overestimate lung function

a. A peak flow meter is primarily used for monitoring airway obstruction and detecting variability in asthma control. It is not the best tool for measuring airflow limitation, as this requires more precise tests like spirometry, which measure additional lung function parameters (e.g., FEV1). The other statements about the peak flow meter are correct. spirometry is ideal for good measure of airflow limitation, because it shows both inspiratory and expiratory both volumes

5. A 56-year-old smoker presents with cough for the last 10 years associated with progressive shortness of breath. The cough is usually mucoid and occasionally purulent. He wheezes while he talks. Adventitious breath sounds are heard in all lobes. His chest x-ray reveals significant *bronchial wall thickening*
What is the most likely diagnosis in this patient?

A. Asthma

B. Emphysema

C. Chronic bronchitis

D. Subacute bronchitis

E. Allergic bronchitis

c. This patient's chronic cough for 10 years with mucoid sputum, progressive shortness of breath, and wheezing aligns with chronic bronchitis (blue bloaters), a component of COPD. The chest X-ray findings of bronchial wall thickening further supports this diagnosis. Chronic bronchitis is commonly seen in smokers and is characterized by productive cough lasting ≥3 months/year for at least 2 consecutive years. Other options like asthma or emphysema do not fully fit the clinical picture.

6. A 22-year-old non-smoker student presents with *cough* for eight months which is mostly at night. There is no fever, weight loss, shortness of breath. His physical examination and chest X-ray are *normal*.
What is the most likely diagnosis?

A. Allergic bronchitis

B. Cough variant asthma

C. Bronchial asthma

D. Loffler's syndrome

E. Chronic obstructive pulmonary disease

b. Cough variant asthma is characterized by a chronic cough, typically worse at night, with no other significant symptoms such as shortness of breath, fever, or weight loss. It is a form of asthma where cough is the sole presenting symptom, often with a normal chest X-ray and physical examination. It is commonly seen in younger individuals, including non-smokers.

For asthma diagnosis, NICE recommends:

- Assessing clinical history (episodic symptoms, variability, triggers).
- Objective testing: Spirometry, bronchodilator reversibility, or FeNO testing (fractional exhaled nitric oxide).

As this patient lacks key features of bronchial asthma, cough variant asthma is the more likely diagnosis based on NICE recommendations.

7. A 24-year-old woman develops wheezing and shortness of breath when exposed to cold air or when exercising. These symptoms are getting worse.
What is the most appropriate drug for her before exercise?

A. Inhaled β2 agonist

B. Oral aminophylline

C. Inhaled anticholinergic

D. Inhaled sodium cromoglycate

E. Inhaled corticosteroids

a. This patient has exercise-induced bronchoconstriction (a form of asthma), where shortness of breath and wheezing are triggered by exercise or cold air. According to the NICE guidelines, the first-line treatment for preventing symptoms in such cases is a short-acting β2 agonist (SABA) like salbutamol, used 15-30 minutes before exercise.

8. A 55 years old COPD patient asks you about preventive vaccines for COPD patients as his cousin in UK also has COPD but he received some vaccines. Which vaccine would like to advise to him based on clinical evidence, assuming that all vaccines are available in your town?

A. Meningococcal

B. Hemophilus influenzae

C. BCG

D Influenza II

E. Hepatitis B

d. For COPD patients, annual influenza vaccination is strongly recommended to reduce the risk of respiratory infections, which can exacerbate COPD and worsen outcomes. Clinical evidence shows that influenza vaccination reduces hospitalizations, exacerbations, and mortality in COPD patients.
Other vaccines recommended for COPD patients (but not listed in the options):

- Pneumococcal vaccine: To prevent pneumococcal infections.
- Haemophilus influenzae vaccine: May be beneficial but not routinely recommended unless specific indications exist.

Vaccines like meningococcal, BCG, or hepatitis B are not specifically indicated for COPD prevention.

9. You are requested to see a woman at home. She can not come to your clinic because of *plaster* on her leg. She complaints of shortness of breath, chest heaviness and restlessness. She has been taking *oral contraceptive pills* to delay pregnancy till her leg fracture heels. Her clinical examination is unremarkable.
What would be the most likely diagnosis in her case?

A. Pulmonary embolism

B. Pulmonary hypertension

C. Myocardial infarction

D. Pneumonia

RESOURCE

E. Pneumothorax

a. This woman has risk factors for pulmonary embolism:

- Immobilization due to her leg fracture.
- Use of oral contraceptive pills, which increase the risk of venous thromboembolism.

Her symptoms of shortness of breath, chest heaviness, and restlessness are classic for PE. A clinical examination may be unremarkable in many cases of PE, emphasizing the importance of clinical suspicion. The other options are less likely given the absence of specific symptoms or risk factors.

10. A 19 years old boy has brought by his father to your clinic for evaluation. The boy complains of cough and shortness of breath off and on for 6 months. His father wants you to confirm the diagnosis of asthma as many of his *cousins* are also suffering from asthma. You advised spirometry which shows:

FEV1 ↓↓ FVC ↓

FEV1/FVC 0.3 (0.75 to 0.80)

What does the patient have?

A. Asthma

B. Reactive airway disease

C. Interstitial lung disease

D. Normal pulmonary functions

E. Restrictive lung disease

a. The spirometry results show:

- FEV1 ↓↓: Reduced forced expiratory volume in 1 second.
- FVC ↓: Reduced forced vital capacity.
- FEV1/FVC = 0.3: Severely reduced ratio (<0.75–0.80), indicating obstructive lung disease.

This is consistent with asthma, a common obstructive airway condition. The patient's symptoms of intermittent cough and shortness of breath for 6 months and family history further support the diagnosis. Other conditions, like restrictive lung disease or interstitial lung disease, would show a preserved or increased FEV1/FVC ratio.

11. A principal of a school was diagnosed to have asthma on clinical and spirometry studies 2 months ago. You have prescribed inhaler salbutamol and beclomethasone in optimal doses. His asthma is not yet controlled.
What could be the single most likely cause of not controlling his asthma based on your knowledge of asthma treatment?

A. Worsening of the disease

B. Poor inhaler technique

C. Fake inhalers

D. Poor concordance

E. Wrong choice of medicines

b. The most common cause of uncontrolled asthma, despite appropriate medications, is poor inhaler technique. Even with the correct medications, improper usage prevents the drug from effectively reaching the lungs. This is especially common in patients who are newly diagnosed or not adequately trained.

Other causes, such as poor concordance or worsening of the disease, are possible but less likely as the principal issue in this scenario. Fake inhalers and wrong choice of medicines are rare with a proper diagnosis and prescription.

12. A five year old asthmatic girl is on inhaled beclomethasone BD and inhaled salbutamol on as needed basis. She presents with mild upper respiratory tract infection. Her physical examination is normal and peak flow remains 90% of normal.
What is the most appropriate step regarding management of asthma?

A. Commence montelukast

B. Commence salmeterol

C. Commence oral steroids

D. Increase dose of salbutamol

E. Continue current management

e. The child has well-controlled asthma (peak flow 90% of normal) and presents with a mild upper respiratory tract infection. No adjustments to asthma therapy are needed at this stage. Continue with inhaled beclomethasone and salbutamol as needed while monitoring for worsening symptoms.

13. A 45 year old asthmatic man on 1600 ug of beclomethasone daily and BD salbutamol presents with a cough productive of mucoid sputum and shortness of breath on minimal exertion. His peak flow is 50 % of the patient's best value.
What is the most appropriate immediate management?

A. Formoterol

B. Prednisolone

C. Cromoglycate

D. Ipratropium

E. Theophylline

b. The patient has uncontrolled asthma with exacerbation (productive cough, shortness of breath, and peak flow at 50% of best). NICE and GINA recommend oral corticosteroids (Prednisolone) to reduce inflammation during exacerbations. Usual dose: 40-50 mg daily for 5-7 days. Continue regular inhaled therapy and monitor response.

14. A 30 years male smoker comes with SOB, non productive cough and wheeze for last 3 months. His initial peak flow is *300 L/minute*. You give salbutamol inhaler and Dr measures peak flow again.
At which of the following levels of peak flow after salbutamol would you diagnose him as *asthmatic patient*?

A. 320 L/minute

B. 330 L/minute

C. 340 L/minute

D. 350 L/minute

E. 360 L/minute

e. There is some confusion here, Lets resolve this. Although Reversibility testing of >12 % is diagnostic for Asthma which makes the answer (300×0.12=36L/min, making option of 340L/min more plausible) but, there is also requirement of 200 mL increase in FEV_1 post bronchodilators according to guidelines and Guidelines imply that an absolute PEFR improvement of ≥60 L/min corresponds to a 200 mL increase in FEV_1.

So, the answer 360 L/min is based on stricter criteria that require:

- ≥12% improvement in PEFR.
- A 60 L/min increase in PEFR (matching the 200 mL FEV_1 threshold for diagnostic certainty).😊

15. A 30 years male complains of SOB and nonproductive cough particularly in the morning for the last 1 month and sometime he also wheezes. You advise him to check his PEFR at home for 1 week. It shows variation in the reading. For how many days variation in reading is necessary to label him a patient of asthma.

A. 1day/week

B. >2 day/week

C. >3 day/week

D. >4 day/week

E. > 5 day/week

c. Variation in PEFR readings on more than 2 days per week supports a diagnosis of asthma. Daily variability indicates poor airway control and confirms the diagnosis.

16. An asthmatic patient comes in emergency with severe attack of asthma. You measure his PEFR and it is 45% of his best.
What is the cut off of PEFR for life threatening asthma?

A. < 66%

B. 55%

C. < 44%

D. < 33%

E. < 22%

D. < 33%

d. < 33%

ASTHMA SEVERITY

Severity of Asthma Exacerbation	PEFR as a Percentage of Predicted Value
Mild	**80–100%**
Moderate	**50–79%**
Acute Severe	**33–49%**
Life Threatening	**<33%**

17. A 60 years old man presents with chronic productive cough for last 10 years. He smokes 2 packs/day for last 30 years. His BMI is 34kg/m^2. He becomes short of breath when he climbs up the stairs and it is increasing day by day.

Which of the following pulmonary function test is most useful in differentiating this condition from asthma?

A. FEV1

B. FEV1/FVC

C. PEFR

D. Residual volume

E. FVC

b.FEV_1/FVC < 0.7 confirms COPD (fixed obstruction), while reversible improvement suggests asthma.

18. A 50 years chronic smoker patient comes OPD with SOB when he changes his dress. You advise him lung function test for diagnosis. What would be the value of FEV1/FVC to make diagnosis of COPD?

A. <30%

B. <50%

C. <70%

D. <90%

E. <110%

c. COPD is diagnosed when post-bronchodilator FEV_1/FVC <70% (fixed obstruction). Severity is classified by FEV_1 percentage based on GOLD criteria. Mild COPD (FEV_1 ≥80%), moderate (50-79%), severe (30-49%), and very severe (<30%). Smoking cessation and bronchodilators are key treatments.

19. A 50 years asthmatic patient presents with poorly controlled asthma & he wants to *monitor* his asthma *at home* so that he can adjust his medicine according to your advice. Which one of following pulmonary function test is most easily carried out *at home*.

A. FEV1/FVC ratio

B. FVC

C. PEFR

D. Residual volume

E. FEV1

c. Peak Expiratory Flow Rate (PEFR) is the easiest test for home asthma monitoring. It helps track airway variability and guide medication adjustment. Patients record PEFR twice daily, and >20% variability suggests poor control.

20. A 40 years old man came to emergency with breathlessness, wheezing. He is unable to talk in sentences without break.
His B.P is 130/96,
Pulse 120/min.
R/R 30/min,
PEFR<50% best.
Which of the following stage of asthma characterizes this stage:

A. Mild asthma.

B. Moderate asthma.

C. Severe asthma

D. Life threatening asthma.

E. Brittle asthma.

c. Severe asthma is characterized by breathlessness, inability to speak in full sentences, RR ≥30, pulse ≥120, and PEFR <50%. Immediate treatment includes high-dose SABA, oxygen, steroids, and monitoring for deterioration. If no improvement, consider IV magnesium sulfate or aminophylline.

21. A 37yrs old housewife comes to your clinic with mild shortness of breath during exercise. You advised PEFR and spirometry, which shows variability of 8% in reading and change in FEV1 is 100/min.

Her pulse-82/min, BP=110/70, R/R-24/min.

What will you tell her that she has?

A. Asthma.

B. No asthma.

C. COPD

D. CCF

E. Viral disease

b. Asthma diagnosis requires PEFR variability >10% or FEV_1 improvement >12% & 200 mL post-bronchodilator. This patient has only 8% PEFR variability and 100 mL FEV_1 change, which does not meet the diagnostic threshold. Consider alternative causes of breathlessness.

22. A 14yrs girl visits to your clinic with cough and breathlessness for last one month. Her PEFR decreases 70L after 6min exercise.

Her pulse 90/min

BP 100/70,

temp=98.6˚F

What is your diagnosis.

A. Asthma

B. COPD

C. Fatigue

D. NO disease

E. Seasonal problem

a. Exercise-induced asthma is confirmed by a ≥10% drop in PEFR after exercise. A 70L decrease suggests significant airway hyperresponsiveness. Diagnosis is supported by symptoms like cough and breathlessness. Management includes SABA (e.g., salbutamol) before exercise and ICS for long-term control.

23. A 30 yrs old man comes to clinic with severe cough, unilateral wheeze, shortness of breath and chest tightness.
His BP-120/100 mmHg
Pulse-120/min
Temp-99

What is the next step in management.

A. Admit hospital

B. LABA

C. I/V steroids

D. Nebulize with salbutamol

E. Short acting B agonist inhaler

a. Severe cough, **unilateral wheeze**, shortness of breath and chest tightness strongly suggest foreign body. Admission is required for further management.

24. A 20 yrs old medical student comes to asthma clinic He has severe cough, wheezing and wakes up 2 times/week due to his symptoms. He is taking salbutamol inhaler 6 times/week. What is the next step in management.

A. Increase short acting ß agonist

B. Add oral salbutamol

C. Add oral steroid

D. Add inhaled steroid ICS

E. Add long-acting B agonist

d. Frequent symptoms (≥3 days/week) and night awakenings (≥2 times/week) indicate uncontrolled asthma. Overuse of SABA (6 times/week) suggests a need for controller therapy (ICS). NICE & GINA recommend low-dose ICS as the next step to reduce airway inflammation and prevent exacerbations.

25. A 25 yrs old patient comes to clinic with severe cough and wheezing He is taking 12 puffs/day of salbutamol. Regarding asthma control what is your opinion

A. Mildly controlled

B. Moderately controlled

C. Poorly controlled

D. Good controlled

E. Borderline controlled

c. Using salbutamol ≥3 times/week or >12 puffs/day indicates poor asthma control. Frequent SABA use suggests underlying inflammation needing controller therapy (ICS). NICE & GINA recommend stepping up treatment with ICS or ICS/LABA to prevent exacerbations.

26. A 60 yrs old teacher comes for routine checkup. He has cough and slight chest tightness. He is taking LABA and salbutamol PRN.
His BP 120/70 mmHg
PULSE 78/min
R/R 26.

What will you advise him?

A. Continue same treatment

B. Add leukotriene Receptor antagonists

C. Increase LABA

D. Inhaler steroids (ICS)

E. Oral steroids

d. Persistent symptoms despite LABA and SABA PRN indicate uncontrolled asthma. GINA & NICE recommend adding ICS to LABA for better control. ICS reduces airway inflammation, preventing exacerbations and long-term complications.

27. A 30 yrs old female comes to you for follow up. She is taking regular treatment for asthma and well controlled on salbutamol PRN and inhaled steroid.

When will you cut down treatment.

A. Immediately

B. One month

C. Two months

D. Three months

E. Four months

d. Review and consider stepping down at intervals ≤3 mo. Maintain on the lowest dose of inhaled steroid controlling symptoms. When reducing steroids, cut dose by 25–50% each time. OHGP 5th Ed Page 864

28. A 39 yrs old lady comes to you. She has severe cough and wakes up at night due to shortness of breath. She is taking LABA and inhaled steroids but control is still inadequate.

What is the next step in management?

A. Add montelukast

B. Increase inhaled steroids

C. Increase LABA

D. Oral salbutamol

E. Stop long-acting beta agonists

a. Uncontrolled asthma despite ICS/LABA requires additional controller therapy. GINA & NICE recommend adding a Leukotriene Receptor Antagonist (LTRA) like Montelukast as the next step. If symptoms persist, consider increasing ICS dose or adding LAMA (Tiotropium).

29. A pregnant lady of one month known asthmatic *well controlled* on present treatment comes to clinic. She is worried that medicine for asthma may harm her baby and whether she can breastfeed her baby after delivery.

What will you tell her regarding her worry?

A. Admit to hospital

B. Continue medicine.

C. Change oral medicines to inhaler

D. Change oral medicines to I/v drugs

E. Stop all medicines

b. Affects ~5% of pregnant women. Generally improves with pregnancy, especially into the third trimester. In most cases, treat asthma as usual—most drugs commonly used for treatment of asthma are safe in pregnancy. Women with poorly controlled asthma are at risk of early labour and IUGR. OHGP 5th Ed Page 800

30. A 4yrs old child came with severe cough and wheezing He wakes up at night 3 times/week. He is using salbutamol + inhaled steroid. He has no fever.

What is next step in management?

A. Add leukotrienes Receptor antagonists

B. Add oral steroids

C. Increase both

D. Increase salbutamol

E. Increase inhaled steroid

a. Leukotriene receptor antagonists (e.g. montelukast). May ↓ symptoms and exacerbations and ↑ lung function. First-choice add-on therapy for children <5y. OHGP 5th Ed Page 864

31. A mother brings her 2 years old son with complaints of cough running nose and vomiting. He is active and is taking feeds less than his normal routine. His respiratory rate is 36/minute and there is harsh breathing bilaterally.
What is the most likely diagnosis in this case?

A. Pneumonia

B. Asthma

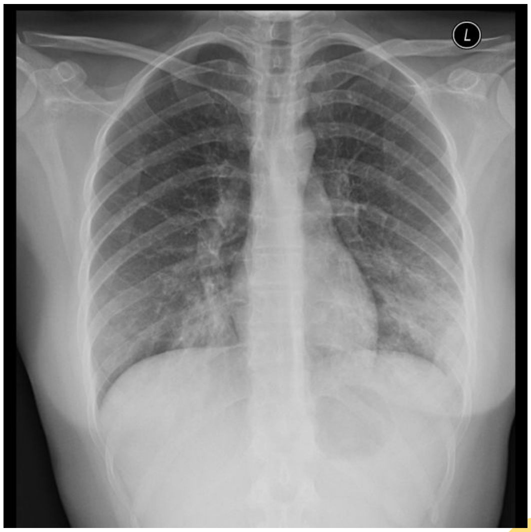
C Viral infection

D. Bronchitis

E. Reactive airway disease

c. Cough, runny nose, vomiting, and harsh breathing without severe respiratory distress suggest a viral upper respiratory tract infection (URTI). Normal feeding reduction is common. Respiratory rate (36/min) is within normal limits for age, ruling out pneumonia. Supportive care is the mainstay of treatment.

32. A 28 years old pregnant woman presents to you with 8 days history of cough, shortness of breath, fever and diarrhea. There is bilateral harsh breathing and bilateral rhonchi are present on auscultation.



What would you like to prescribe to her at this stage based on etiology of organisms in her case?

A. Ciprofloxacin

B. Amoxicillin

C. Erythromycin

D. Doxycycline

E. Cotrimoxazole

c. The pregnant woman likely has atypical pneumonia, possibly caused by Mycoplasma pneumoniae or Chlamydia pneumoniae, given the symptoms (cough, SOB, fever, diarrhea) and chest X-ray findings. Erythromycin is safe during pregnancy and effective against atypical organisms. Avoid drugs like ciprofloxacin, doxycycline, or cotrimoxazole, which are contraindicated in pregnancy.

33. A 24 years old women presents with productive cough, shortness of breath and fever for 10 days. There are crepitations at *right* mid lung zone. His Chest x-ray shows

How would you manage this patient?

A. Start Amoxicillin for 10 days

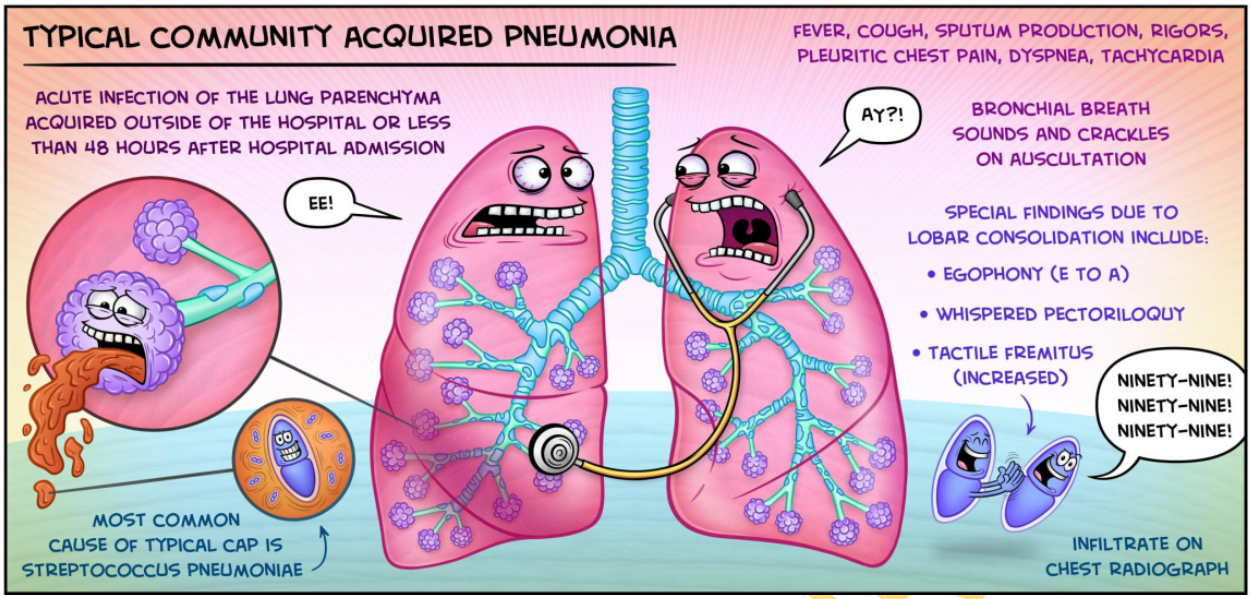
B. Start Ofloxacin for 10 days

C. Start anti-tuberculous therapy

D. Send 3 sputum AFB smears

E. Start Cefixime for 10 days

a. The patient presents with symptoms and X-ray findings suggestive of community-acquired pneumonia (CAP) localized to the right mid-lung zone. Amoxicillin is the first-line treatment for CAP per WHO guidelines. If no improvement, consider further workup, such as sputum AFB for tuberculosis.


TYPICAL COMMUNITY ACQUIRED PNEUMONIA
ACUTE INFECTION OF THE LUNG PARENCHYMA ACQUIRED OUTSIDE OF THE HOSPITAL OR LESS THAN 48 HOURS AFTER HOSPITAL ADMISSION
EE!
AY?!
FEVER, COUGH, SPUTUM PRODUCTION, RIGORS, PLEURITIC CHEST PAIN, DYSPNEA, TACHYCARDIA
BRONCHIAL BREATH SOUNDS AND CRACKLES ON AUSCULTATION
SPECIAL FINDINGS DUE TO LOBAR CONSOLIDATION INCLUDE:
• EGOPHONY (E TO A)
• WHISPERED PECTORILOQUY
• TACTILE FREMITUS (INCREASED)
NINETY-NINE! NINETY-NINE! NINETY-NINE!
MOST COMMON CAUSE OF TYPICAL CAP IS STREPTOCOCCUS PNEUMONIAE
INFILTRATE ON CHEST RADIOGRAPH

34. A 24 years old man presents with productive cough, shortness of breath and fever for 10 days. His respiratory rate is 32/minute and he is *disoriented* There are crepitations at right lower lung zone How would you manage this patient?

A Refer for admission

B. Send to chest X-ray

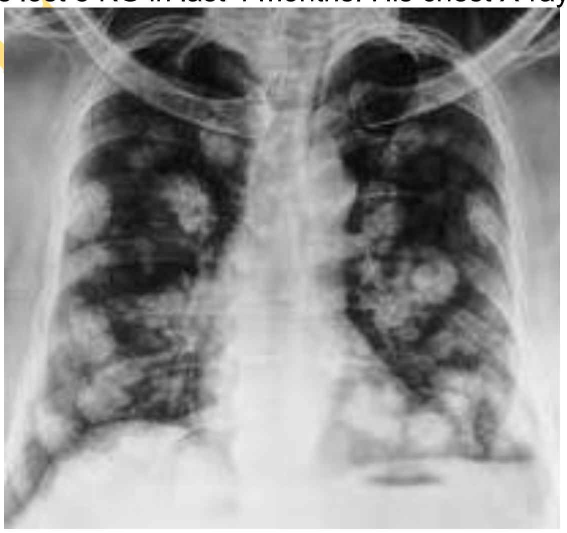
C. Oral antibiotics

D. Refer to chest OPD

E. IV antibiotics and follow in 24 hours

a. The patient has severe pneumonia with tachypnea (RR 32/min), disorientation, and localized lung findings. These are markers of high severity (CURB-65 criteria). Immediate hospital admission is required for IV antibiotics and supportive care to prevent complications.

35. A 50 years man comes to your clinic with complaints of cough, shortness of breath and bilateral chest pain. He has lost 8 KG in last 4 months. His chest X-ray shows:



FREE RESOU

What is the most likely diagnosis?

A. Tuberculosis

B Cannon ball lesion

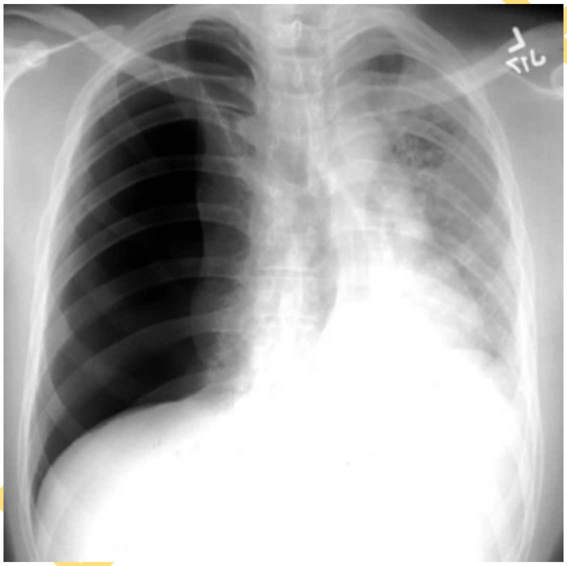
C. Pneumothorax

D. Pulmonary edema

E. Multiple hydatid cysts

b. The chest X-ray shows multiple well-defined round opacities (cannon ball lesions), which are highly suggestive of metastatic lung disease, commonly from primary cancers like renal, colorectal, or breast cancer. The weight loss and systemic symptoms support this diagnosis. Further evaluation with CT chest and cancer screening is essential.

36. A 45 years old chronic smoker presents to clinic with acute onset of cough, shortness of and restlessness. On examination there is reduced air entry on the right side.
His chest X-ray shows:



What is the most likely diagnosis?

A. Tuberculosis

B. Cannon ball lesion

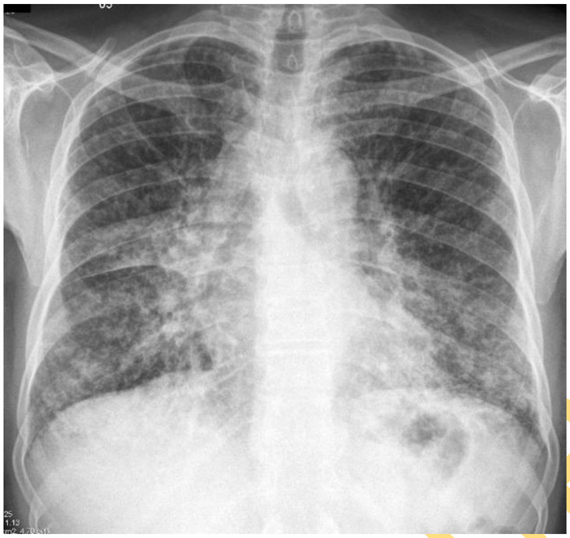
C Pneumothorax

D. Pulmonary edema

E. Multiple hydatid Cysts

c. History of acute onset of cough, shortness of and restlessness along with deviation of trachea towards opposite side with educed air entry strongly suggests Tension Pneumothorax

37. A 35 years man presents to your clinic with 6 months history of cough, nausea, vomiting, skin rashes, joint pains and weight loss. He also has history of recurrent radiopaque renal stones. On examination there are *tender swelling on skins*; His chest X-ray shows:



A. Atypical pneumonia

B. Pulmonary edema

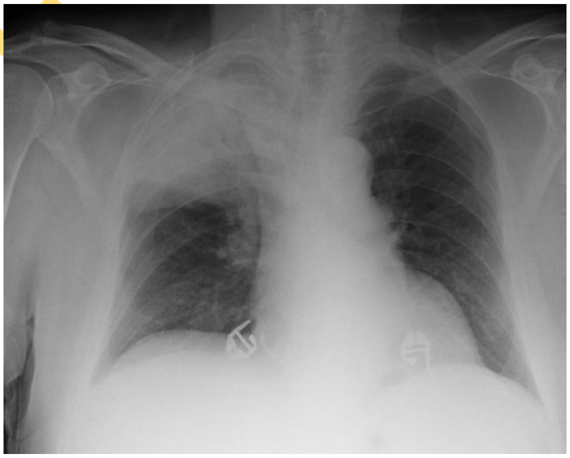
C. Hilar lymphadenopathy

D. Fibro cavitary lesion

E. Atelectasis

c. The chest X-ray shows bilateral hilar lymphadenopathy, likely due to sarcoidosis based on systemic symptoms (skin rashes, joint pain, weight loss) and history of recurrent renal stones (hypercalcemia). Sarcoidosis often involves lungs, skin, and lymph nodes. Diagnosis is confirmed with imaging (e.g., HRCT) and biopsy.

38. A 48 years diabetic man presents to your clinic with 7 days history of productive cough, shortness of breath and fever.
Her chest X-ray shows:



What is the most likely diagnosis?

A. Atelectasis

B. Pneumothorax

C. Lung abscess

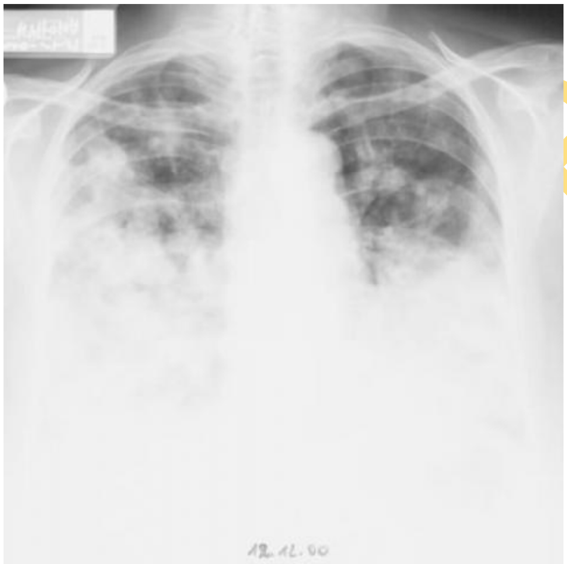
D Pneumonia

E. Cannon balls

d. History of diabetic along with productive cough, shortness of breath, fever along with patch of consolidation on CXR strongly suggests Pneumonia.

39. A 45 years chronic smoker presents to your clinic with cough, hemoptysis and shortness of breath for the last 3 months. His chest X-ray shows:

What is the most likely diagnosis?



A. Emphysema

B. Pulmonary edema

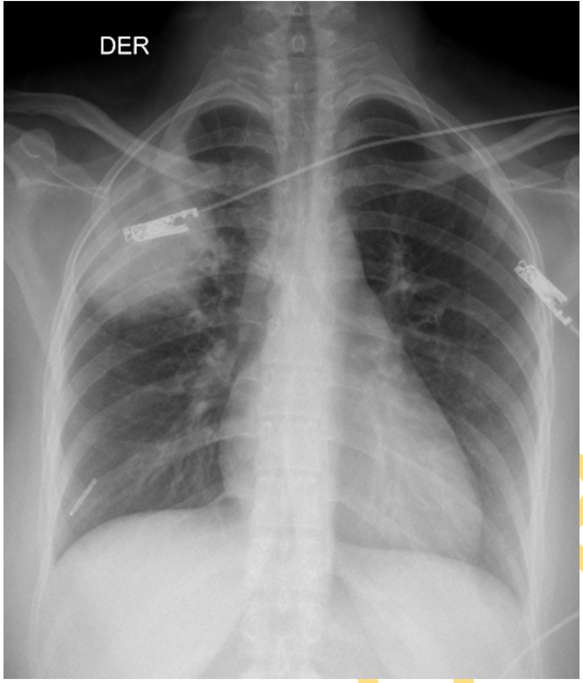
C Broncho alveolar carcinoma

D. Atypical pneumonia

E. Pulmonary fibrosis

c. The chest X-ray shows bilateral opacities with gross obliteration of costophrenic angles on both sides of chest along with pleural effusion. Also, the history of chronic smoking, cough, hemoptysis strongly goes in favor of Broncho alveolar carcinoma

40. A 35 years man presents to your clinic with 7 days history of productive cough, fever and shortness of breath. His past medical history has been unremarkable. His chest X-ray shows



What is the most likely organism in this case?

A. Pneumococcus

B. Klebsiella

C. Staph aureus

E. Legionella

D. Tuberculosis

a. Short history of productive cough, fever and shortness of breath along with single patch of consolidation in right upper zone of CXR strongly suggests Typical Community Acquired pneumonia and most common organism causing CAP is Pneumococcus.

41. A 35 years diabetic presents to your clinic with 7 days history of productive cough, fever and shortness of breath. He was admitted in hospital for control of blood sugar 1 week ago and was discharged after 3 days His chest X-ray shows:

What is the most likely organism in this case?

A. Pneumococcus

B. Klebsiella

C. Staph aureus

D. Tuberculosis

E. Legionella

b. Refer to the table below as most common organism in diabetic patient is Klebsiella.

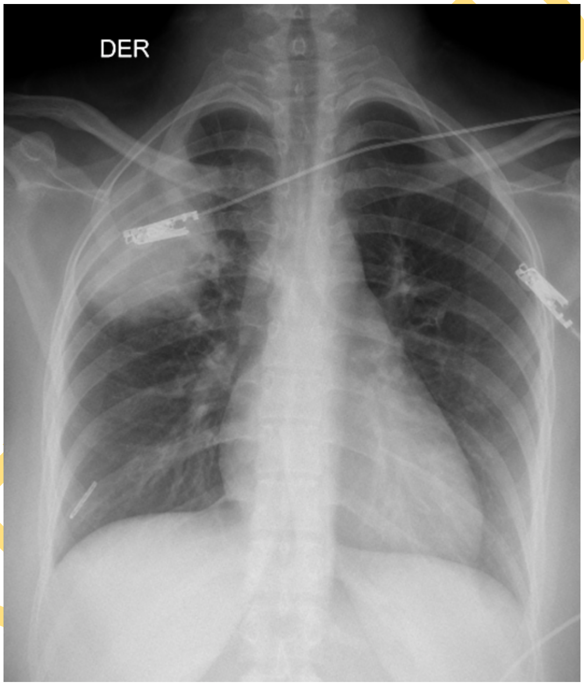
COMMON PATHOGENS AND THEIR ASSOCIATIONS

Pathogen	Association

Haemophilus influenzae	COPD
Staphylococcus aureus	Recent viral infection (influenza)
Klebsiella pneumoniae	Alcoholism, diabetes
Anaerobes	Poor dentition, aspiration
Mycoplasma pneumoniae	Young, healthy patients
Chlamydia pneumoniae	Hoarseness
Legionella	Contaminated water sources, air conditioning, ventilation systems
Chlamydia psittaci	Birds
Coxiella burnetii	Animals at the time of giving birth, veterinarians, far

42. A 35 years diabetic presents to your clinic with 2 months history of productive cough, fever and shortness of breath. He has lost 5 Kg during this period.

His chest X-ray shows:



What is the most likely organism in this case?

A. Pneumococcus

B. Klebsiella

C. Staph aureus

D. Tuberculosis Mycobacterium

E. Legionella

d. Given the patient's 2-month history of productive cough, fever, shortness of breath, and unintentional weight loss, the most likely diagnosis is tuberculosis (TB). The prolonged duration of symptoms and the associated weight loss are characteristic of pulmonary TB, which is a chronic infection.

43. A 68 year old lifelong non-smoking man presents every few months with fever, cough with copious sometimes blood- stained sputum and pleuritic chest pain. In between times he is quite well but has an occasional productive cough. He had pulmonary tuberculosis 10 years ago.

A Pneumonia

B. Bronchiectasis

C. Atelectasis

D. Pneumothorax

E. Pulmonary embolism

b. Given the patient's history of pulmonary tuberculosis (TB) 10 years ago and his recurring episodes of fever, copious productive cough (sometimes blood-stained), and pleuritic chest pain, the most likely diagnosis is bronchiectasis.

44. A nursing home resident has devolved a cough productive of Muco-purulent sputum with a fever since a flu epidemic swept the home the week before. What is the likely pathogen in this case?

A. Legionnaires' disease

B. Respiratory Syncytial virus

C. Haemophiles Influenzae

D. Streptococcus pneumonia

E. Staphylococcus aureus

e. Staphylococcus aureus is associated with recent viral infections (e.g., influenza), which aligns with the patient's history of a flu outbreak.

The muco-purulent sputum and fever suggest secondary bacterial pneumonia, commonly caused by this pathogen after viral epidemics.

45. A 17 years old boy comes to your clinic with history of sore throat, cough, nasal stuffiness, nausea and upper abdominal pain since five days. On examination bilateral cervical lymph nodes are enlarged. There are whitish exudates on tonsils.
What is the most likely diagnosis in this case?

A. COPD.

B. Lymphoma

C. Sarcoidosis

D. Tuberculosis

E. Infectious mononucleosis

e. Sore throat, cervical lymphadenopathy, whitish tonsillar exudates, and systemic symptoms (e.g., nausea, abdominal pain) suggest infectious mononucleosis caused by Epstein-Barr virus (EBV). It commonly affects young individuals and presents with fever, pharyngitis, and lymphadenopathy. Diagnosis is confirmed with Monospot test or EBV serology.

46. A tall, thin, 30-year-old male presents to the emergency department with an acute onset of right- sided pleuritic chest pain, and dyspnea. He is in distress and is not able to speak. There is reduced air entry on the right side.

What emergency measure would be life saving for this patient in a family medicine clinic?

A. Immediate start of CPR

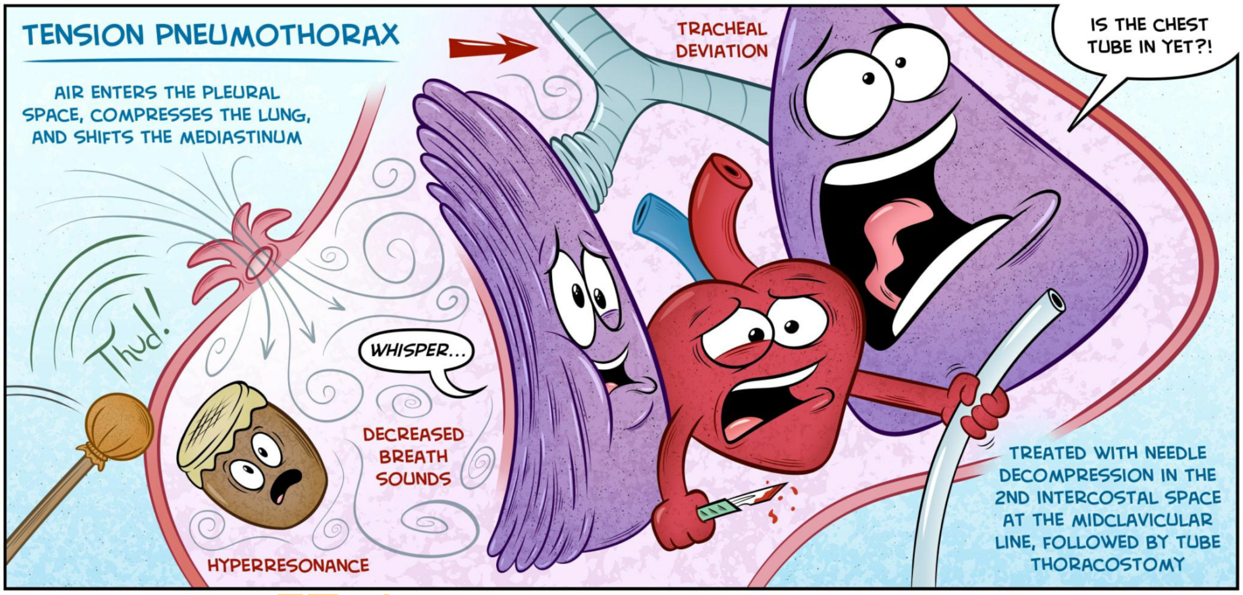
B. Two large bore IV lines

C. Immediate nebulizer with Salbutamol

D. Intravascular Hydrocortisone injection

E large bore cannula into the intercostal space

b. The presentation suggests a tension pneumothorax (acute pleuritic chest pain, dyspnea, reduced air entry, and distress). Immediate needle decompression with a large-bore cannula in the 2nd intercostal space, midclavicular line is life-saving. This relieves pressure and prevents cardiovascular collapse.


TENSION PNEUMOTHORAX
AIR ENTERS THE PLEURAL SPACE, COMPRESSES THE LUNG, AND SHIFTS THE MEDIASTINUM
TRACHEAL DEVIATION
IS THE CHEST TUBE IN YET?!
Thud!
WHISPER...
DECREASED BREATH SOUNDS
HYPERRESONANCE
TREATED WITH NEEDLE DECOMPRESSION IN THE 2ND INTERCOSTAL SPACE AT THE MIDCLAVICULAR LINE, FOLLOWED BY TUBE THORACOSTOMY

47. A 65 year old man has had 5 kg weight loss. He is, an ex-smoker and used to work in a *coal mine.* Chest X ray shows a large right sided pleural effusion and several *pleural plaques* in both lung peripheries. Pleural aspiration reveals proteins of 50 G/L. What is the next best investigation?

A. Bronchoscopy

B. Lung function tests

C. Spiral CT of the chest

D Thoracoscopy and biopsy

E. Sputum for AFB

d. The patient's pleural effusion with high protein (exudative effusion), weight loss, pleural plaques, and occupational exposure (coal mining) suggest malignancy or mesothelioma. Thoracoscopy and biopsy is the best investigation to confirm the diagnosis, as it allows direct visualization and sampling of pleural tissue.

48. A 45 year old man who works in a *cotton mill* presents with fluctuating breathlessness. He has been getting progressively more breathless for 10 months. There is also associated chest tightness and cough. Upon assessment the patient has oxygen saturations of 95% and a normal chest x ray. What is the likely diagnosis?

A. Occupational asthma

B. Berylliosis

C. Extrinsic allergic alveolitis

D. Byssinosis

E. Sarcoidosis

d. Byssinosis (cotton worker’s lung) is common in individuals exposed to cotton dust. Symptoms include fluctuating breathlessness, chest tightness, and cough, which worsen at the start of the workweek and improve on days off. Normal chest X-ray and absence of systemic features help differentiate it from other conditions.

49. A 5-year-old child is brought to the emergency department by his mother. The mother tells you that for the past 24 hours the child has been "talking strangely" and *drooling.* He has had no appetite and has not been drinking.

Based on this history, what is the diagnosis of Medical major concern?

A. Viral pneumonia

B. Acute epiglottitis

C. Bronchiolitis

D. Croup

E. Bacterial pneumonia

c. Acute epiglottitis is a medical emergency in children, presenting with drooling, muffled speech ("talking strangely"), refusal to eat/drink, and potential airway obstruction. It is commonly caused by Haemophilus influenzae type B (HiB). Immediate airway management and IV antibiotics are critical to prevent respiratory failure.

50. Dr. Khawar and Dr. Shakeel were sponsored by a pharmaceutical company to attend a conference in Egypt. They stayed at an air-conditioned hotel for 3 days sharing a single room. After returning both of them cough, yellow sputum, nausea, abdominal pain and diarrhea. On examination they look sick and there are bilateral rhonchi.

How would treat these doctors?

A. Ofloxacin

B. Clarithromycin

C. Acyclovir

D. Amoxicillin

E. Cepharadine

b. The symptoms and history suggest Legionnaires' disease, caused by *Legionella pneumophila*. It is associated with exposure to air conditioning systems and presents with cough, yellow sputum, gastrointestinal symptoms, and systemic illness. Macrolides (e.g., Clarithromycin) are the treatment of choice.

51. A 43 years old female comes with her husband who complains that his sleep is disturbed because of her snoring. She is worried because of weight gain, coarse skin and menorrhagia. What is the most appropriate cause of her symptoms?

A. Dysfunctional uterine bleeding

B. Hypothyroidism

D. Cushing's syndrome

E. Endometrial carcinoma

b. Snoring, weight gain, coarse skin, and menorrhagia are classic features of hypothyroidism. It can cause systemic symptoms, including metabolic slowing and menstrual irregularities. Confirm diagnosis with TSH and free T4 levels, and treat with levothyroxine.

52. A 40 years old man comes after a minor road traffic accident which happened because he fell asleep during driving. He also falls asleep during meetings and social gatherings. His office work is suffering from his poor concentration and irritable behavior. His sleep is broken and his sexual drive is decreased.
What is the most appropriate management step?

A. CPAP therapy

B. Antidepressant

C. 5 alpha reductase inhibitor

D. Benzodiazepine

E. Cognitive behavior therapy

a. The patient shows classic signs of obstructive sleep apnea (OSA), including daytime sleepiness, poor concentration, irritability, and decreased libido. OSA is commonly associated with fragmented sleep and can cause serious complications. Continuous Positive Airway Pressure (CPAP) is the first-line treatment to improve symptoms and prevent long-term effects.

53. A 24 years old male presents with 10 days history of 103°F fever, cough and right sided chest pain. X. ray shows right sided pleural effusion. Pleural fluid aspirate shows:

Proteins: 45 g/L.

WBC: 20 x 10' per liter

Neutrophils: 80%

Lymphocytes: 18%

What is the most appropriate diagnosis?

A. Tuberculosis

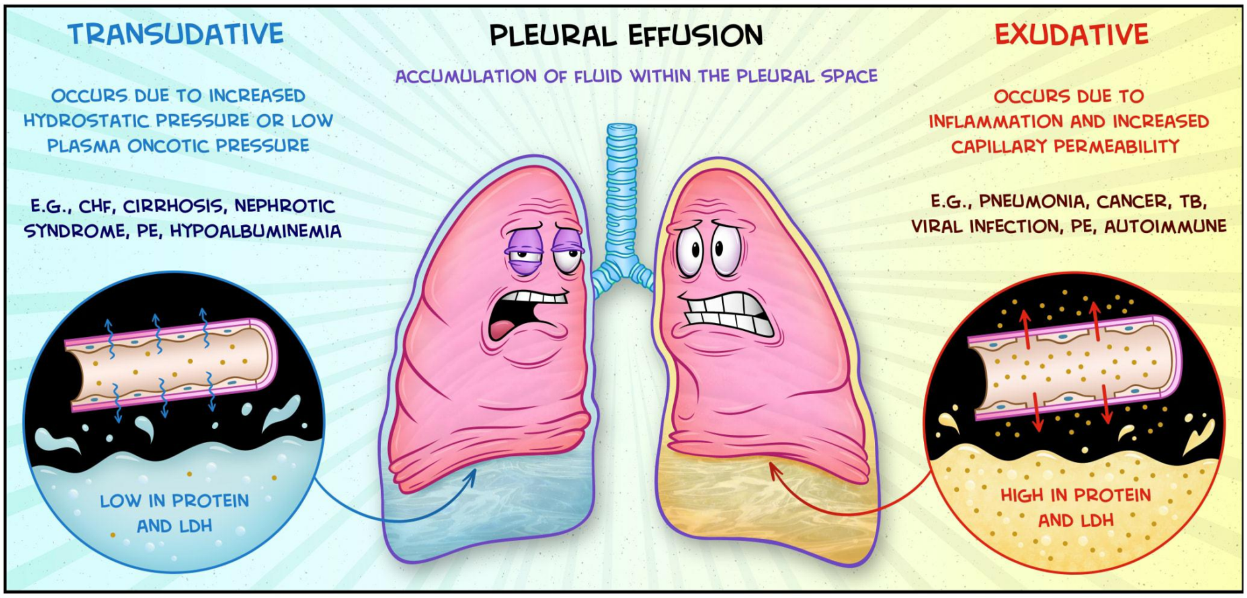
B. Viral pneumonia

C. Typical pneumonia

D. Atypical pneumonia

E. Pulmonary embolism

C. High fever, cough, pleuritic chest pain, and right-sided pleural effusion with neutrophil-predominant pleural fluid (protein 45 g/L) indicate bacterial (typical) pneumonia with parapneumonic effusion. Common organisms include Streptococcus pneumoniae or Haemophilus influenzae. Treat with appropriate antibiotics..


TRANSUDATIVE
OCCURS DUE TO INCREASED HYDROSTATIC PRESSURE OR LOW PLASMA ONCOTIC PRESSURE
E.G., CHF, CIRRHOSIS, NEPHROTIC SYNDROME, PE, HYPOALBUMINEMIA
LOW IN PROTEIN AND LDH
PLEURAL EFFUSION
ACCUMULATION OF FLUID WITHIN THE PLEURAL SPACE
EXUDATIVE
OCCURS DUE TO INFLAMMATION AND INCREASED CAPILLARY PERMEABILITY
E.G., PNEUMONIA, CANCER, TB, VIRAL INFECTION, PE, AUTOIMMUNE
HIGH IN PROTEIN AND LDH

54. A 7 days old neonate is brought to your clinic with H/O fever, irritability and refusal to take food. Which organism is most likely responsible for his symptoms?

A. Staph aureus

B. H. influenzae

C. Streptococcus

D. Chlamydia

E. E. Coli

c. Neonatal sepsis (fever, irritability, poor feeding) in the first week of life is commonly caused by E. coli and Group B Streptococcus (GBS). These organisms are acquired during birth from the maternal genital tract. Immediate IV antibiotics (Ampicillin + Gentamicin/Cefotaxime) are required to prevent complications

55. A 10 years old boy presents with fever, headache. body aches and dry cough. His CXR shows bilateral patchy consolidation. What is the most suitable antibiotic for him?

A. Amoxicillin

B Erythromycin

C. Ciprofloxacin

D. Ceclor

E. Septran

b. Fever, headache, body aches, dry cough, and bilateral patchy consolidation suggest atypical pneumonia, most commonly caused by Mycoplasma pneumoniae in children. WHO recommends macrolides (e.g., Erythromycin or Azithromycin) as first-line treatment for Mycoplasma pneumoniae and Chlamydia pneumoniae.

FREE RESO

56. A 28 years old university student presents with cough, fever & chest pain. On inquiry he is found to be an IV drug user. His Temperature is 102 F. Pulse 100/mins, B.P 95/65 mmHg, RR 30/min. What is the most likely causative organism?

A. Hemophilus influenzae

B. Streptococcus pneumonia

C. Staphylococcus aureus

D. Mycoplasma pneumonia

E. Pseudomonas aeruginosa

C. IV drug users are at high risk of Staphylococcus aureus pneumonia, often due to hematogenous spread from endocarditis. Symptoms of fever, cough, chest pain, hypotension (95/65), and tachypnea (RR 30) suggest a severe infection. S. aureus can cause necrotizing pneumonia with cavitations, requiring IV antibiotics (Vancomycin or Linezolid if MRSA suspected).

57. Mr John 45 years old business man is HIV Positive. On screening his tuberculosis skin test is 6 mm. What is the most appropriate advice regarding his treatment?

A. No action required at this time

B. Repeat Tuberculin after 6 months

C. Start I.N.H for 6 months

D. Start I.N.H+ Rif for 6 months

E. Start 4 drug A.T.T intensive phase

e. In HIV-positive individuals, a tuberculin skin test (TST) ≥5 mm is considered positive, indicating latent TB infection (LTBI). WHO recommends Isoniazid (INH) for 6 months to prevent progression to active TB. No need for full ATT unless active TB is confirmed.

RESOURC

TUBERCULOSIS

Topic	Details
Caused by	*Mycobacterium tuberculosis*
Transmission	Droplet infection
Symptoms	Cough ≥3 weeks, hemoptysis, fever, night sweats, weight loss, anorexia
Investigations	**General:** CXR **Specific:** Sputum for AFB (3 samples)
Sputum for AFB	Before 4-drug ATT, test for rifampicin resistance using Gene-Xpert
Treatment Duration	**Pulmonary TB:** 6 months (2 months HRZE + 4 months HR) **Extra-pulmonary TB:** 12 months
First-Line Drugs	**Isoniazid (H):** 5 mg/kg **Rifampicin (R):** 10 mg/kg **Pyrazinamide (Z):** 25 mg/kg **Ethambutol (E):** 15 mg/kg
Side Effects	**Isoniazid:** Neuropathy (Vitamin B6 needed) **Rifampicin:** Red discoloration

	Pyrazinamide: Joint pains **Ethambutol:** Optic neuritis
Key Treatment Notes	If vomiting occurs within 1 hour of taking medicine, repeat the dose Monitor LFTs; stop drugs if ALT > 3x normal with jaundice and starts after jaundice settles 1 by 1.
Contraindications	Avoid rifampicin with hormonal contraceptives (use barrier methods) Avoid alcohol
Special Populations	**Pregnant Women:** First-line drugs safe with B6 supplementation **Breastfeeding:** Continue treatment; baby requires prophylaxis
Case Definitions	**New Case:** No prior TB treatment or have taken anti-TB drugs for less than 1 month **Cured:** Smear negative at end of treatment **Relapsed:** Active TB after prior treatment
Monitoring	Sputum smear at months 2, 5, and 6

58. Mr. Singh 30 years old school teacher comes for annual health check up. He has good health & has no risk of T.B. Tuberculin test is also done. At which level would you call his Tuberculin test positive for TB?

A. >5 mm

B. >8 mm

C. > 10 mm

D. > 12 mm

E. > 15 mm

e. > 15 mm

e. > 15 mm. 👆

59. A 20 years old student presents low fever, cough and weight loss. He was diagnosed as case of T.B one month ago & took A.T.T for three weeks. His sputum smear is negative.

How would you classify him?

A. New case

B. Relapse

C. Treatment failure

D. Cured

E. Chronic case

a. Case Definitions:

a. New Case

- New TB Case – The patients who have never been treated for TB or have taken anti-TB drugs for less than 1 month.
- Cured – A patient registered as smear-positive, has completed the duration of treatment, and becomes sputum smear negative at the end of treatment and on at least one previous occasion.

- Relapse: TB patients who were previously treated for TB, were declared cured or treatment completed at the end of their most recent course of treatment. Relapse may either be due to reinfection or reactivation of dormant bacilli
- Patients whose sputum is smear-positive at the end of (or returning from) a second or subsequent course of treatment are no longer defined as "chronic". Instead, they should be classified by the outcome of their most recent retreatment course: Relapsed, Defaulted or Failed.

60. Mr. Ahmed 35 years old cloth seller on antituberculosis therapy present with problem of difficulty to differentiate between different *colors*. Which medicine is most likely responsible for his problem?

A. Isoniazid

B. Rifampicin

C. Pyrazinamide

D. Ethambutol

E. Streptomycin

d Ethambutol

61. Mr. Ali presents with 2 months history of fever, cough and weight loss. He received complete course of ATT five years ago. Which is the right option for initial intensive phase?

A. HRZE 2 months, HZ 1 month

B. HRZSE 2 months, 1 month

C. HRZE 2 months, HR 4 months

D. HRZSE 2 months, HRZE 1 month

E. HRZSE 2 months, HRZE 2 month

c. HRZE 2 months, HR 4 months

62. A 32 years old woman on anti-tuberculous treatment for 1 month got pregnant. She is concerned about her fetus. What is the most appropriate management step?

A. Continue ATT

B. Defer during first trimester

C. Defer till delivery

D. Termination of pregnancy

E. Continue INH and Rifampicin only

a. TB in Pregnancy/ Breastfeeding:

- All pregnant women with TB must be managed in the same manner as any TB patients.
- All Pregnant patient with TB should receive B6 vitamin.
- Baby born to a mother with TB will receive 6 months INH only Prophylaxis

INFECTIOUS DISEASES

1. A 68 years old male, known case of cardiac failure comes to your clinic for first dose of influenza vaccination. Which allergy should specifically be inquired before giving this vaccine?

A. Allergy to eggs

B. Allergy to red dye

C. Allergy to penicillin

D. Allergy to milk

E. Allergy to dust mite

a. Before administering the influenza vaccine, it is important to specifically inquire about an allergy to eggs, as some influenza vaccines are manufactured using egg-based technology. However, most people with mild egg allergies can still receive the vaccine under medical supervision.

2. A 22 years old man presents with four days history of painless eruptions on his face. He is otherwise normal. On examination, there are multiple groups of small papular lesions on his face. These lesions are discrete, pearly pink and umbilicated. The roommate of this patient also has same problem. What is the most likely diagnosis?

A. Herpes zoster

B. Molluscum contagiosum

C. Viral warts

D. Folliculitis

E. Milia

b. The description of painless, pearly pink, umbilicated papular lesions that are discrete and in clusters is characteristic of Molluscum contagiosum, a viral infection caused by a poxvirus. The fact that the roommate also has similar lesions supports the diagnosis due to its contagious nature.

3. The case scenario as above. Which is the suitable treatment option you can offer to this patient?

A. Acyclovir

B. Oral Penicillin

C. Topical steroids

D. Cryotherapy

E. Calamine lotion

d. In Molluscum contagiosum, untreated lesions resolve spontaneously after 12–18mo. Treatment is not needed. Seek specialist advice if immunocompromised. Cryotherapy (liquid nitrogen) is an effective treatment option for removing the lesions. Other options include curettage or topical agents like cantharidin. Acyclovir, antibiotics, steroids, and calamine lotion are not effective for this condition.

4. A 18 years old male presents with one week history of sore throat, fever and malaise. His cervical lymph nodes are enlarged and spleen is palpable two fingers below the costal margin. His blood film shows atypical lymphocytes. Which antibiotic should be avoided in this patient?

A. Amoxicillin

B. Co-trimoxazole

C. Minocycline

D. Ciprofloxacin

E. Clindamycin

a. Management of infectious mononucleosis Advise rest, fluids, and regular paracetamol, avoid alcohol. Try salt-water gargles or aspirin gargles (only if >16y). Consider a short course of prednisolone for severe symptoms. Treat 2° infection with antibiotics. Advise to avoid contact sports/heavy lifting for >1mo due to risk of splenic rupture. Symptoms may last several months). Do not prescribe amoxicillin as it may cause a rash. OHGP 5th Ed Page 913

5. Clinical scenario as above. This patient is a sportsman and asks you when he can start playing again. What is your advice

A. When he is afebrile

B. When his blood tests are normal

C. When his physical examination is normal

D. Whenever he wants

E. After a rest of one week

c. A sportsman recovering from an illness can resume physical activity once a thorough physical examination confirms normal findings, ensuring that the patient has fully recovered and is fit to engage in sports without risk of complications (splenic rupture)

6. A patient has been taking standard anti tuberculous treatment (ATT) for three months for pulmonary tuberculosis but his symptoms of cough, and low-grade fever have not resolved. You suspect multi drug resistant tuberculosis in which there is resistance to the following drugs

A. INH and Rifampicin

B. INH and Ethambutol

C. Rifampicin and Ethambutol

D. Rifampicin and Pyrazinamide

E. Any of the above combination

a. Multi-drug-resistant tuberculosis (MDR-TB) is defined as resistance to at least Isoniazid (INH) and Rifampicin, the two most potent first-line anti-tuberculous drugs. Other combinations do not meet the definition of MDR-TB.

7. A patient on anti-tuberculous treatment for the last four weeks comes to you with complaints of pain and swelling of right ankle. Examination shows swollen, red, hot and tender ankle. All the other joints are normal.

Which of the following drugs can cause this problem

A. Isoniazid

B. Rifampicin

C. Ethambutol

D. Pyrazinamide

E. Pyridoxine

d. Pyrazinamide can cause hyperuricemia, leading to gout or gout-like symptoms such as pain, swelling, redness, and tenderness in joints, most commonly the ankle or big toe. Other anti-tuberculous drugs are less commonly associated with such side effects.

8. A 56 years old male, known case of chronic myeloid leukemia comes to your clinic asks for vaccination against different diseases because of his immunosuppressed. Which of the following vaccines should be given to this patient?

A. Hepatitis A

B. Hepatitis B

C. Tetanus

D. Influenza

E. Oral typhoid

d. For an immunosuppressed patient with chronic myeloid leukemia, the inactivated influenza vaccine is essential to prevent severe complications from the flu. Avoid live vaccines, such as oral typhoid.

9. A 16 years old girl presents with two days history of severe headache and facial rash. She also has fever, malaise and knee pain. She denies any neck stiffness, nausea or vomiting. On examination her pulse is 96/min, BP is 125/75 mm Hg and temperature is 99.8 °F. There is maculopapular rash on her chest and enlarged posterior cervical lymph nodes. Neurological exam is fine. What is the most likely diagnosis?

A. Rubella

B. Measles

C. Chicken pox

D. Meningococcemia

E. Typhoid

a. The girl's presentation with fever, malaise, maculopapular rash, and enlarged posterior cervical lymph nodes strongly suggests Rubella (German measles). Unlike measles, Rubella does not typically involve severe systemic symptoms like conjunctivitis or Koplik spots. The absence of neck stiffness, vomiting, or neurological findings rules out meningitis-related causes.

10. A 52-year-old male presents with chronic symptoms of dyspnoea and cough. He denies any other medical illness but gives 20 pack year smoking history. On examination anteroposterior diameter of chest is increased. Chest x-ray shows flattened diaphragms. Which of the following vaccination should be given to him annually?

A. Influenza

B. H. influenza

C. Meningococcal

D. Pneumococcal

E. Tetanus

a. The patient likely has chronic obstructive pulmonary disease (COPD) based on his smoking history, dyspnea, and chest X-ray findings (flattened diaphragms, increased AP diameter). Annual influenza vaccination is crucial for preventing exacerbations of respiratory symptoms in such patients. Pneumococcal vaccination is also recommended but typically not annually.

11. A 23 year old female nurse has a needle stick injury while drawing blood from a patient with acute hepatitis B. She received HBV vaccination 4 years ago and had a documented response to the vaccine.

What will be the most appropriate next step in her management?

A. Administration of HB immunoglobulins

B. Booster dose of HB vaccination

C. Administration of both immunoglobulins and vaccine

D. Check anti-HBs titer level

E. Just Reassure her

d. Just reassure her, the appropriate management for a healthcare worker who has sustained a needlestick injury from a patient positive for hepatitis B surface antigen (HBsAg) depends on the worker's vaccination status and documented immune response. In this scenario, the nurse received the hepatitis B vaccine four years ago and had a documented adequate response. For individuals with a documented adequate response (anti-HBs ≥10 mIU/mL), no postexposure prophylaxis is necessary. Therefore, the most appropriate next step is to reassure her that no further intervention is required.

It's important to note that checking anti-HBs titers is recommended for those with unknown antibody response or inadequate response to vaccination. In this case, since the nurse had a documented adequate response, additional testing or prophylaxis is not indicated.

12. An 18 year old male presents after he is bitten on his left leg by an unprovoked street dog The dog ran away. The patient's leg shows deep bite marks.

What will be the most appropriate step after cleaning the wound?

A. Reassurance

B. Passive immunization

C. Active immunization

D. Active and passive immunization

E. Antibiotic and Tetanus toxoid

d. For a deep bite by an unprovoked dog where the dog's rabies status is unknown, the appropriate management includes:

- Passive immunization with human rabies immunoglobulin (HRIG) to provide immediate protection.
- Active immunization with the rabies vaccine series to stimulate long-term immunity.
- Additionally, clean the wound thoroughly and assess the need for tetanus prophylaxis and antibiotics to prevent secondary bacterial infection.

13. A 55 years old diabetic lady comes to you after you started her on anti-tuberculous treatment (ATT) one month back. She complains about her deranged blood glucose levels which were well controlled 15 days back.

Which of her following drugs can cause this effect?

A. Isoniazid

B. Rifampicin

C. Ethambutol

D. Pyridoxine

E. Streptomycin

b. Rifampicin can interfere with blood glucose control by inducing hepatic enzymes, leading to increased metabolism of oral hypoglycemic agents or insulin. This can result in fluctuating or elevated blood glucose levels in diabetic patients. Regular monitoring and dose adjustment of anti-diabetic medications may be required.

14. The lady discussed above reports to you again This time her blood sugar is controlled but she is experiencing unbearable burning sensation in her feet and hands. What will be your plan?

A. Stop Isoniazid

B. Increase the dose of Pyridoxine

C. Prescribe parenteral B12

D. Prescribe Gabapentin

E. Refer to a neurologist

b. The burning sensation in her hands and feet is likely due to peripheral neuropathy, a known side effect of Isoniazid. This occurs due to pyridoxine (vitamin B6) deficiency caused by Isoniazid. Increasing the dose of Pyridoxine (commonly 50-100 mg/day) usually alleviates these symptoms. Stopping Isoniazid is not necessary unless symptoms persist despite supplementation.

15. You have started anti tuberculous treatment 29 years old lady for smear positive pulmonary tuberculosis. She is deeply concerned about eight months old breastfed baby. What is your advice for this baby?

A. No prophylaxis is needed

B. Prophylaxis for one month

C. Prophylaxis for two months

D. Prophylaxis for four months

E. Prophylaxis for six months

e. For an infant exposed to a mother with smear-positive pulmonary tuberculosis, six months of isoniazid prophylaxis is recommended. The infant should be closely monitored, and BCG vaccination should also be ensured if not previously administered. Breastfeeding can continue as the benefits outweigh the risks, provided the mother adheres to treatment and infection control measures.

16. A 65 year old female had cholecystectomy 10 days ago. She now presents to you with one day history of painful itchy rash just above the angle of scapula and spread horizontally all the way to right nipple. On examination the rash is vesicular and the skin is red and excoriated. The most effective treatment is:

A. Immunoglobulins

B. Oral analgesics

C. Oral Acyclovir

D. Topical steroids

E. Tricyclic antidepressants

c. The description of a vesicular, painful, and itchy rash in a dermatomal distribution (from the scapula to the nipple) is consistent with herpes zoster (shingles). The most effective treatment is oral Acyclovir or other antiviral agents (e.g., valacyclovir, famciclovir) initiated promptly to reduce the severity and duration of symptoms. Pain management with oral analgesics can be added as supportive therapy.

17. A 28 year old man presents with three days history of pain in right upper abdomen. The pain is associated with nausea and vomiting. On examination, he is afebrile and has scleral icterus. His right upper abdominal quadrant is tender. Which of the following is the most appropriate initial investigation?

A. Hepatitis A IgG titer

B. Hepatitis A IgM titer

C. Anti HBsAg titre

D. Anti HCV antibody

E. HCV RNA levels by PCR

b. The patient's symptoms of right upper quadrant pain, nausea, vomiting, scleral icterus, and tenderness suggest acute hepatitis, most likely Hepatitis A in this age group. The Hepatitis A IgM titer is the most appropriate initial test as it confirms recent or acute infection with the Hepatitis A virus. Other tests (e.g., Hepatitis B or C markers) are less relevant in this acute presentation.

18. A 24 weeks pregnant female plans to fly to an African country to see her husband who works there. Which of the following vaccinations or prophylaxis, she *cannot* take:

A. Meningococcal

B. Pneumococcal

C. Hepatitis A

D. Yellow Fever

E. Malarial prophylaxis

d. Yellow fever vaccine is a live attenuated vaccine, and its use is generally contraindicated during pregnancy due to potential risks to the fetus. However, in rare cases where the risk of yellow fever infection is high and travel cannot be avoided, the vaccine may be considered after careful evaluation. All other vaccines and prophylaxis mentioned are generally safe in pregnancy if indicated.

19. A 22 years old male has undergone splenectomy after a roadside traffic accident. Which of the following vaccines is recommended to him in this background:

A. Influenza vaccine

B. Hepatitis B vaccine

C. Typhoid vaccine

D. Pneumococcal vaccine

E. Tetanus

d. After a splenectomy, the patient is at high risk for infections by encapsulated bacteria, including Streptococcus pneumoniae, Haemophilus influenzae type b, and Neisseria meningitidis. Pneumococcal vaccination is strongly recommended, along with vaccines for Haemophilus influenzae type b and meningococcal disease. An annual influenza vaccine is also recommended but not specific to splenectomy.

20. A 24 years old female patient is a known case of immune thrombocytopenic purpura (ITP). An elective splenectomy has been advised to her. What is the most appropriate time for giving vaccination?

A. Two weeks before splenectomy

B. One week before splenectomy

C. 30 minutes before surgery

D. Within first week of splenectomy

E. Any time after splenectomy

a. Start vaccinations ≥2wk before splenectomy/starting immunosuppressive treatment. OHGP 5th Ed Page 627

21. A 21 years old newly married female comes to your clinic after having watched a TV program on Rubella. She has never been vaccinated against Rubella and is now asking for it. Her pregnancy test is negative. After vaccination, you advise her to avoid pregnancy for;

A. One week

B. Two weeks

C. Four weeks

D. Eight weeks

E. Twelve weeks

e. Offer a check for rubella status if unknown. If not immune, suggest MMR vaccination; avoid pregnancy for 3mo afterwards (live vaccine) and recheck immunity after 3mo. OHGP 5th Ed Page 764

22. A 61 years old diabetic female presents with three weeks history of headache, neck stiffness vomiting and fever. After clinical examination and necessary investigations your diagnosis is tuberculous meningitis. How long should she take ATT?

A. Six months

B. Eight months

C. Twelve months

D. Fifteen months

E. Eighteen months

c. The recommended duration of anti-tuberculous treatment (ATT) for tuberculous meningitis is typically 12 months, as the central nervous system involvement requires a longer course of therapy to ensure complete eradication of the infection and prevent relapse. Treatment should include the standard four-drug regimen (Isoniazid, Rifampicin, Pyrazinamide, and Ethambutol) with adjunctive corticosteroids in the initial phase.

23. You advised MMR vaccine to a 19 years old female. Next week she comes with her husband and a positive pregnancy test. How would you manage this patient?

A. Don't tell her anything about vaccine

B. Advise abortion

C. Advise Rubella IgM

D. Advise Rubella IgG

E. Explain and advise to continue pregnancy

e. Although the MMR vaccine is contraindicated during pregnancy due to being a live attenuated vaccine, there is no evidence of harm to the fetus if it is inadvertently given. The patient should be explained, and the pregnancy should be continued without any specific intervention. Advising abortion is not warranted.

24. A 5 years old girl comes for Rubella vaccination. She was hospitalized for Guillan Barre Syndrome (GBS) one month back for which she received immunoglobulins.

When will you give her rubella vaccine after immunoglobulins?

A. One month

B. Two months

C. Three months

D. Four months

E. Five months

c. BCG; measles; mumps; oral typhoid; rubella; yellow fever. Do not give live vaccines: With immunoglobulin (from 3wk before to 3mo after). OHGP 5th Ed Page 619

25. A 30 weeks pregnant woman presents with running nose, fever and dry cough for two days. What is the best treatment option?

A. Rest, fluids and Paracetamol

B. Influenza vaccine

C. Antibiotics

D. Antiviral

E. Antihistamine with decongestant

a. For a pregnant woman at 30 weeks with mild flu-like symptoms (runny nose, fever, and dry cough), rest, fluids, and paracetamol are the first-line treatments. These measures address symptoms and ensure hydration and fever control.

- Influenza vaccine is preventive and not used to treat active infection.
- Antivirals may be considered if influenza is confirmed, especially if symptoms are severe or high risk.
- Antibiotics are unnecessary unless a bacterial superinfection is suspected.

26. A 3 months old baby presents with respiratory failure. Two days ago, he had flu with fever. Then he developed vomiting, neck stiffness and tremor of right hand.

What is the most probable diagnosis?

A. Pyogenic meningitis

B. Tuberculous meningitis

C. Guillain Barre Syndrome

D. Poliomyelitis

E. Viral encephalitis

d. Poliomyelitis, presents with 2d flu-like prodrome then fever, tachycardia, headache, vomiting, stiff neck, and unilateral tremor (‘pre-paralytic stage’). 65% who experience the pre-paralytic stage go on to develop paralysis (myalgia, LMN signs ± respiratory failure). OHGP 5th Ed Page 551

27. A woman brings her six weeks old baby for vaccination. She herself is a case of CCF and has recently been vaccinated against Pneumococcal disease. She wants her baby should also be vaccinated against this infection. What is the appropriate age for this vaccination?

A. At birth

B. Two weeks

C. Four weeks

D. Six weeks

E. Eight week

d. The Pneumococcal conjugate vaccine (PCV) is routinely administered starting at 6 weeks of age, as part of the standard immunization schedule. The baby should receive subsequent doses as per the recommended schedule for full protection against pneumococcal disease.

28. A baby was given DPT vaccination and four days after he developed fits and altered conscious level. The parents think this was due to the vaccine.

The encephalitis is "vaccine related" if it occurs;

A. Within three days of vaccination

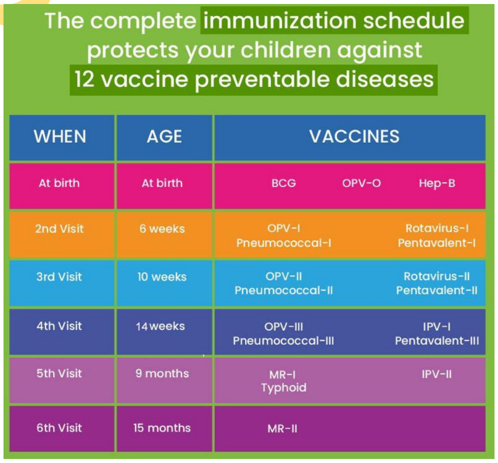
B. One week after vaccination

C. Two weeks after vaccination

D. Three weeks after vaccination

E. One month after vaccination

a. Encephalitis or seizures occurring within three days (72 hours) of DPT vaccination can be considered potentially "vaccine-related," although such adverse events are extremely rare. Events occurring beyond this time frame are unlikely to be associated with the vaccine and require investigation for other causes.👉



The complete immunization schedule protects your children against 12 vaccine preventable diseases

WHEN	AGE	VACCINES
At birth	At birth	BCG OPV-O Hep-B
2nd Visit	6 weeks	OPV-I Pneumococcal-I Rotavirus-I Pentavalent-I
3rd Visit	10 weeks	OPV-II Pneumococcal-II Rotavirus-II Pentavalent-II
4th Visit	14 weeks	OPV-III Pneumococcal-III IPV-I Pentavalent-III
5th Visit	9 months	MR-I Typhoid IPV-II
6th Visit	15 months	MR-II

29. An 8 years old child comes after road side accident with a clean wound. He had his last booster dose of tetanus vaccine given three years back. What should be your plan?

A. Tetanus toxoid

B. Tetanus immunoglobulin

C. Tetanus toxoid+ immunoglobulin p

D. Another booster of tetanus vaccine

E. No vaccination

e. For a clean wound in a child who has received a booster dose of tetanus vaccine within the last 10 years, no additional tetanus vaccination or immunoglobulin is required. The child is adequately protected. For dirty wound, < 5 years no longer require booster.

WHO SHOULD HAVE TETANUS VACCINATION? - OHGP

Immunization Status	Clean Wound	Tetanus-Prone Wound	High-Risk Wound
• **Aged ≥11y** (received primary immunization & last booster <10y ago) • **Aged 5–10y** (received primary immunization & pre-school booster) • **Aged <5y** (received primary immunization)	None	None	None
Aged ≥11y (received primary immunization, last booster ≥10y ago)	None	**Give vaccine**	**Give vaccine + Tetanus Ig (TIG)**
Aged 5–10y (received primary immunization, no pre-school booster)	None	**Give vaccine**	**Give vaccine + TIG**
Not received primary immunization	**Give vaccine**	**Give vaccine + TIG**	**Give vaccine + TIG**
Uncertain immunization status (including those born before 1961)	**Give vaccine**	**Give vaccine + TIG**	**Give vaccine + TIG**

Tetanus-prone injuries

- Puncture-type injuries acquired in a contaminated environment and likely to contain tetanus spores, e.g., gardening injuries.
- Wounds containing foreign bodies, e.g., splinters.
- Compound fractures.
- Wounds/burns with systemic sepsis.
- Certain animal bites and scratches from animals that have been rooting in soil or agricultural animals.

High risk: Heavy contamination with material likely to contain tetanus spores; extensive devitalized tissue and/or wounds awaiting surgical intervention delayed for >6h.

30. A 22 years old labor had a wound on ankle while working at road side. There is a 3 cm full thickness laceration on foot. His previous immunization is unknown. How will you manage this case?

A. Inj T.T + Co-amoxiclav

B. Inj T.T + T.I.G

C. Inj Tetanus Toxoid (T.T)

D. Inj Tetanus Immune Globulin

E. Inj TIG + Co-amoxiclav

FREE

b. patient has tetanus prone wound and satus of previous immunization unkonwn, thatswhy give T.T + T.I.G. 👆

31. A 12 years old boy was bitten by a pet dog unprovoked one hour ago. The dog is restrained at house. What is the single most appropriate step in management at this stage?

A. Rabies Immune Globulin

B. Rabies vaccine

C. Rabies vaccine + R.I.G

D. Wait for 10 days

E. Wound care

b. Rabies vaccine 0,3 ,7 untill observation for 10 days. If dog shows signs of rabies – continue remaining days

32. A baby is brought to you for pertussis vaccination. He had a fit three weeks ago. Which of the following is the cause of deferring pertussis vaccination?

A. Febrile convulsions

B. Well controlled epilepsy

C. Poorly controlled epilepsy

D. Family history of epilepsy

E. Family history of febrile convulsions

c. Personal or FH of febrile convulsion, FH of epilepsy and well-controlled epilepsy are *not* contraindications—give advice on fever prevention. Defer vaccination if any undiagnosed/evolving neurological condition or poorly controlled epilepsy until the condition is stable—if in doubt, seek specialist paediatric advice. OHGP 5th Ed Page 298

33. A 26 year old single man presents to your office complaining of a painless ulcer that formed on his penis approximately 3 months ago. The ulcer healed, but an erythematous rash on the palms and soles of his feet has recently developed. He also reports generalized fatigue, malaise, fever, headache, and arthralgias. The most likely diagnosis is:

A. Behcet's syndrome

B. Chancroid

C. Genital herpes

D. Lymphogranuloma venereum

E. Secondary Syphilis

e. Sphillis - Caused by *Treponema pallidum*. If suspected, send blood for VDRL, TPHA or treponemal antibody absorption depending on local policy. In all confirmed cases refer for specialist care. Contact tracing is essential. *4 stages*:

Primary syphilis Chancre at the site of contact

- **Secondary syphilis** 4–8wk after chancre—systemic symptoms: fever, malaise, generalized lymphadenopathy, anal papules (condylomata lata), rash (trunk, palms, soles), buccal snail track ulcers, alopecia
- **Tertiary syphilis** 2–20y after initial infection—gummas (granulomas) in connective tissue, e.g. testicular gumma
- **Quaternary syphilis** Cardiovascular or neurological complications. OHGP 5th Ed Page 725

34. A 45 years businessman from UK plans to visit Pakistan. Which one of the following statements about antibiotic prophylaxis for traveler's diarrhea is correct?

A. Azithromycin is recommended.

B. Ciprofloxacin is recommended.

C. It is not routinely recommended.

D. Metronidazole is recommended.

RESOURCE

E. Rifampicin is recommended.

c. Antibiotic prophylaxis for traveler's diarrhea is not routinely recommended because it can promote antibiotic resistance and alter gut flora. Instead, travelers are advised to focus on preventive measures such as drinking safe water, eating properly cooked food, and maintaining good hygiene. Antibiotics (e.g., azithromycin or ciprofloxacin) may be used as treatment if severe diarrhea develops, especially with dehydration or fever.

35. A 23 years old married women presents with lower abdominal pain, vaginal discharge, dyspareunia. There is cervical discharge cervical excitation and groin tenderness?

What is the single most appropriate treatment option?

A. Ampicillin + Gentamycin

B. Doxycycline + Metronidazole

C. Gentamycin + Ofloxacin

D. Metronidazole + Ampicillin

E. Ofloxacin + Metronidazole

e. PID - Acute pelvic pain (usually bilateral) and deep dyspareunia with bilateral lower abdominal tenderness, cervical excitation, and adnexal tenderness. Treat with:

- Ofloxacin 400mg bd (or levofloxacin 500mg od) + metronidazole 400mg bd for 14d; or
- Ceftriaxone 500mg IM as a single dose, followed by oral doxycycline 100mg bd + oral metronidazole 400mg bd for 14d; or
- Oral moxifloxacin 400mg od for 14d (if M. genitaliumisolated). OHGP 5th Ed Page 714

36. A 24 years old sexually active man presents with uretheral discharge. His urethral gram stain reveals WBCs per oil immersion field. There are no intracellular gram-negative diplococci seen.

What is the most likely diagnosis in this patient?

A. Acute prostatitis

B. Bacterial cystitis

C. Chlamydia

D. Epididymitis

E. Gonorrhea

c. A urethral Gram stain showing WBCs without intracellular gram-negative diplococci suggests non-gonococcal urethritis (NGU). Chlamydia trachomatis is the most common cause of NGU in sexually active men. In contrast, Neisseria gonorrhoeae would present with intracellular gram-negative diplococci.

37. A 34 years old man from Pakistan is planning to travel in rural Africa for a month. Which vaccine is most relevant according to this region?

A. Influenza

B. Meningococcus

C. Pneumococcus

D. Typhoid vaccine

E. Yellow fever

e. Yellow fever is endemic in many parts of sub-Saharan Africa, and vaccination is required for entry into several African countries. The WHO and CDC recommend yellow fever vaccination for travelers going to areas where the disease is present.

38. A 14 years old boy presents with severe headache, chills, fever myalgia, nausea and vomiting. Three days later he developed pink macular rash around wrist and ankles. He has just returned from mountain camping. Which of the following regimens is the treatment of choice for this patient?

A. Ampicillin

B. Doxycycline

C. Gentamicin

D. Metronidazole

E. Vancomycin

b. This patient's symptoms (fever, severe headache, myalgia, nausea, vomiting, and a macular rash starting on the wrists and ankles) after mountain camping are highly suggestive of Rocky Mountain Spotted Fever (RMSF), caused by *Rickettsia rickettsii*. Doxycycline is the drug of choice

39. An 8 years old girl from a village comes with 5 days history of intermittent with chills and myalgias. There are no respiratory, abdominal and urinary complains. Her examination is normal and she is afebrile in your clinic.

What is the single best treatment option for her?

A. Artemether+ Halofantrine

B. Artemether + Lumefantrine

C. Chloroquine + Halofantrine

D. Pyrimethamine + Sulphamethoxazole

E. Quinine sulphate + Doxycline

b. This child from a village with a 5-day history of intermittent fever, chills, and myalgia without other symptoms suggests uncomplicated malaria. The WHO recommends Artemisinin-based Combination Therapy (ACT), with Artemether + Lumefantrine being the first-line treatment in most malaria-endemic regions.

40. A 32 years old man presents with intermittent fever. He has taken Chloroquine for three days. His blood film shows Falciparum malaria. The patient is otherwise stable. How would you treat him?

A. Artemether + Halofantrine

B. Artemether + Lumefantrine

C. Chloroquin Halofantrine

D. Pyrimthamine+ Sulphamethoxazole

E. Quinine sulphate + Doxycline

b. This patient has Plasmodium falciparum malaria, confirmed by a blood film, and has already taken chloroquine, which is ineffective due to widespread resistance. WHO guidelines recommend Artemisinin-based Combination Therapy (ACT), with Artemether + Lumefantrine as the first-line treatment for uncomplicated falciparum malaria.

41. A 27 years old woman has been referred to you by a gynecologist for treatment of malaria. She is in her 3rd month of gestation. Her blood film shows P. vivax. How would you manage her?

A. Artemether

B. Chloroquine

C. Fansidar

D. Halofantrine

E. Quinine

b. Plasmodium vivax malaria in pregnancy should be treated with chloroquine, as it is safe and effective during all trimesters.

42. A 35 years old female presents with intermittent fever with chills, backache, nausea and headache. Her husband tells you that she is talking irrelevant. She looks sleepy during physical examination. Her blood test done a day before show P. falciparum. What treatment should be most suitable for her?

A. Artemether

B. Artesunate

C. Halofantrine

D. IV Chloroquine

E. Mefloquinem

b. This patient has severe malaria caused by Plasmodium falciparum, as indicated by neurological symptoms (confusion, sleepiness). WHO guidelines recommend IV Artesunate as the first-line treatment for severe malaria.

43. A 24 years old presents to you with P. vivax for the third time in six months. According to your advice he has been using mosquito repellants and mosquitos net regularly.

What is the most likely explanation for repeated vivax infections?

A. Fake drugs

B. Hypnozoites

C. Poor compliance

D. Repeated infections

E. Resistance

b. Hypnozoites in liver are the reason for recurrent Vivax infection.

44. A 19 years boy old presents to you with recurrent P. vivax infections. What is the single best drug for him?

A. Artemether

B. Fansidar

C. Halofantrine

D. Mefloquine

E. Primaquine

e. The single best drug for recurrent P. vivax infections is Primaquine. Primaquine is contraindicated in individuals with G6PD deficiency, during pregnancy, Breastfeeding. Additionally, it is avoided in patients with severe hemolytic anemia, bone marrow suppression, or severe systemic diseases, particularly cardiovascular conditions, due to the risk of methemoglobinemia.

45. A mother brings her 2 years old son for vaccination. He has received BCG and first doses of Polio, DPT, Hib and Hepatitis B. How would you manage this case according to EPI?

A. Check antibody levels

B. Give additional booster

C. Give double dose

D. Restart vaccination

E. Resume vaccination

e. Resume vaccination

46. You administered MMR vaccine to a 19 years old girl. Next day she comes with her husband and a positive urine pregnancy test. How would you manage this patient?

A. Advise abortion

B. Advise Rubella IgG

C. Advise Rubella IgM

D. Amniocentesis

E. Continue pregnancy

e. Although the MMR vaccine is contraindicated during pregnancy due to being a live attenuated vaccine, there is no evidence of harm to the fetus if it is inadvertently given. The patient should be explained, and the pregnancy should be continued without any specific intervention. Advising abortion is not warranted. OHGP 5th Ed Page 628

47. A 27 years housemaid comes to your clinic with vaginal discharge. Her husband is a heroin addict and she has 4 children to look after. She admits that she has been having commercial sex for her living.

On examination purulent discharge is visible at the external OS.

How would you treat her?

A. Ampicillin + Metronidazole + Gentamycin

B. Clotrimazole vaginal pessaries

C. Doxycycline + Metronidazole

D. Cap. Fluconazole

E. Cefixime + Doxycycline

c. Inflammation of the male urethra. Multifactorial condition primarily sexually acquired. Mucopurulent cervicitis is the females equivalent. Characterized by discharge and/or dysuria although may be asymptomatic (found when a swab is taken following contact tracing). Doxycycline + Metronidazole is recommeded regimen among given options. OHGP 5th Ed Page 715

48. A 35 years old woman complains of foul smelling greenish frothy vaginal discharge for 1 week. Her husband is asymptomatic and denies any extramarital contacts. How would you treat her?

A. Azithromycin stat

B. Ceftriaxone 250 mg I/M

C. Doxycycline for 2 weeks

D. Fluconazole 150 mg

E. Metronidazole 2 G stat

e. Trichomonas Vaginalis - Advise to avoid sexual intercourse until patients and their partner(s) have completed treatment. First-line treatment is with metronidazole (400–500mg bd po for 5–7d or 2g po stat)—tinidazole 2g po stat is an alternative. OHGP 5th Ed Page 717

49. A 25 years old man presents with painful ulcer on penis and bilateral inguinal lymphadenopathy. Which single antibiotic would you like to choose in this case?

A. Benzathine penicillin

B. Ceftriaxone

C. Ciprofloxacin

D. Erythromycin

E. Spectinomycin

b. A chancroid is a genital ulcer caused by the gram-negative rod Haemophilus ducreyi. The ulcer is painful, with an erythematous base, and may be accompanied by lymphadenopathy. Treat with azithromycin,cefriaxone, or ciprofloxacin.

50. A 12 years old boy presented to your clinic with history of intermittent fever with rigors, body aches and headache. Suspecting malaria you prescribed chloroquine. Two days later he presents with jaundice and weakness. His labs show:

Total bilirubin	8.2
Direct bilirubin	1.0
Indirect bilirubin	7.2
SGPT	36
Alkaline phosphates	170

What is the most likely interpretation?

A. Acute viral hepatitis

B. Cholestatic jaundice

C. Gilbert's syndrome

D. Hemolytic jaundice

E. Obstructive jaundice

d. The most likely interpretation is hemolytic jaundice (D) due to chloroquine-induced hemolysis, likely in the setting of G6PD deficiency. The patient's lab findings show elevated total bilirubin (8.2 mg/dL) with predominantly indirect bilirubin (7.2 mg/dL), while SGPT (36) and alkaline phosphatase (170) are normal, ruling out liver dysfunction or cholestasis. Hemolysis leads to increased breakdown of red blood cells, releasing unconjugated (indirect) bilirubin, which the liver cannot process quickly.

51. A 24 year old female comes to your office with a 2-day history of dysuria accompanied by painful genital lesions that have coalesced to form ulcers. There is no previous history of this condition She has had three sexual partners in the past and inconsistently uses barrier contraceptive methods.

What is the single most likely cause?

A. Chancroid

B. Granuloma inguinale

C. Herpes simplex

D. Human papillomavirus

E Primary syphilis

c. Vesicles prior to ulcer and painful – Herpes Simplex Ref: master the Boards

52. A 25 year old sexually active female comes to your office with a 2-week history of "growths" in the vulvar region. On examination, you find multiple cauliform lesions.

What is the most appropriate initial treatment?

A. Cautery

B. Cryotherapy

C. Podophyllin

D. Salicylic acid

E. Surgery

c. Treatment of clinical warts does not eradicate the virus but removes lesions. Treatment options in primary care:

- Podophyllotoxin is suitable for home treatment of unkeratinized genital warts and licensed for a 4wk course. Avoid in pregnancy, where cryotherapy is used.
- Imiquimod can be used at home for keratinized or non-keratinized warts. Also avoid in pregnancy. Apply 3×/wk. OHGP 5th Ed Page 724.

53. A 19 years old college student presents to your clinic with 3 weeks history of 101° F fever, malaise, anorexia and nausea.

What could be the most likely cause of fever?

A. Hepatitis

B. Leukemia

C. Malaria

D. Tuberculosis

E. Typhoid

e. A 3-week history of fever (101°F), malaise, anorexia, and nausea is highly suggestive of typhoid fever (enteric fever), caused by *Salmonella typhi*. Typhoid classically presents with stepwise fever progression, gastrointestinal symptoms, and systemic illness, particularly in young adults. Hepatitis (A) would show jaundice and elevated liver enzymes

54. An 18 year old woman complains of myalgias, a sore throat, and painful mouth sores for 3 days. Her temperature is 38.20 C. Her gingiva is edematous and erythematous, and there are vesicles on her right upper and lower lips. Her pharynx is mildly erythematous but without exudates, and there is tender mobile cervical lymphadenopathy. Which of the following is the most likely casual agent?

A. Cytomegalovirus infection

B. Herpes simplex infection

C. Infectious mononucleosis ?

D. Primary HIV infection

E. Streptococcus pyogenes

b. Primary HSV stomatitis presents after a prodromal period (<6h) of tingling, discomfort, or itching, small tense vesicles appear on an erythematous base. These burst to form multiple, small, painful mouth ulcers. Infection may be accompanied by systemic symptoms, e.g. fever, malaise and tender lymph nodes. May be asymptomatic and go unnoticed. Management is to give symptomatic relief—try analgesic mouthwashes, e.g. benzydamine; healing occurs in 8–12d. If seen <48h after onset prescribe oral antivirals, e.g. aciclovir 200mg 5×/d. If unable to take fluids/becoming dehydrated, admit for IV fluids.

55. A 22 year old man presents with burning on urination and a milky urethral discharge for 3 days. He has unprotected sex 5 days prior to the onset of these manifestations. A smear of the urethral discharge demonstrates gram-negative diplococci in neutrophilic granulocytes. The patient reports no allergies. Which of the following is the most appropriate treatment?

A. Amoxicillin + Doxycycline

B. Azithromycin + Doxycycline

C. Ceftriaxone + Doxycycline

D. Ciprofloxacin + Metronidazole

E. Doxycycline + Erythromycin

c. This patient has gonococcal urethritis, confirmed by gram-negative diplococci inside neutrophils on a urethral smear, which is diagnostic for Neisseria gonorrhoeae. The CDC and WHO recommend Ceftriaxone (500 mg IM single dose) PLUS Doxycycline (100 mg BID for 7 days) to cover both Gonorrhea and possible Chlamydia coinfection.

56. A 19 years old homosexual man presents with diarrhea of 2 days. His diarrhea is accompanied by prominent bloating, flatulence, nausea, and general malaise. Examination of the abdomen reveals diffusely hyperactive bowel sounds without tenderness or masses. A stool sample is negative for red and white blood cells. Which of the following is the most appropriate next step in management?

A. Ciprofloxacin

B. Cotrimoxazole

C. Mebendazole

D. Metronidazole

E. Ringer's lactate

d. Giardiasis - Flagellate protozoan. Infection is suggested by an incubation period ≥2wk; watery stool with flatus ++ (explosive diarrhoea); no fever. Stool microscopy may be −ve. If suspected treat with metronidazole. Rapid response is diagnostic. OHGP 5th Ed Page 625

57. A 25 yrs old athlete presents with 2 days history of fever, cough, runny nose, body aches, headache and diarrhea. His temp is 101 °F, chest is clear and there are no sign of dehydration. He is just returned from Mexico. You suspect influnenza HINI infection

What is the single most appropriate step?

A. Acyclovir

B. Amantidine

C. Interferon

D. Management at home

E. Oseltamivir

e. Oseltamivir and zanamivir are recommended to ↓ complications in adults and children if all of the following apply:

- National surveillance schemes indicate circulating influenza
- The person is in an 'at- risk' group
- The person presents with an influenza- like illness and can start treatment within 48h (or within 36h for zanamivir treatment in children) of the onset of symptoms as per licensed indication. OHGP 5th Ed Page 293

58. A 35 years woman presents to your clinic saying that some of her hen are sick and she has been giving them oral medicines for three days. She is asymptomatic but very concerned about having bird flu. What is the single most appropriate step?

A. Amantadine orally for 5 days

B. Face mask & hand washing

C. Influenza vaccine annually

D. Kill all the birds & burry them

E. Segregate sick and healthy birds

b. Face mask & hand washing is ideal option.

DERMATOLOGY

1. A 16 years old girl presents with red rings with central purple area on palms. She has taken some pills from medical store.

What is the single most likely causative drug?

A. Cefuroxime

B. Clarithromycin

C. Erythromycin

D. Paracetamol

E. Sulphonamide

e. A 16-year-old girl with red rings and a central purple area on the palms suggests erythema multiforme, which is commonly triggered by sulphonamides, penicillins, NSAIDs, and anticonvulsants. Sulphonamides are a well-known cause of drug-induced erythema multiforme.

2. A 27 yrs old patient presents with red swollen skin that is peeling in sheets. He is taking sulphonamide for chest infection.

What is single most likely diagnosis?

A. Erythema multiforme

B. Erythroderma

C. Fixed drug eruption

D. Psoriasiform drug eruption

E. Toxic epidermal necrolysis

e. A 27-year-old patient with red, swollen skin that is peeling in sheets while taking sulphonamides suggests Toxic Epidermal Necrolysis (TEN), a severe drug reaction causing widespread skin detachment and mucosal involvement. It is a life-threatening emergency requiring urgent medical attention.

3. A 35 years old male presents with erythematous papules and pustules on face and back for the last 1 month. He is taking tab. Prednisolone as prescribed by chest physician.

What is most probable diagnosis?

A. Acneiform eruption

B. Erythroderma

C. Fixed drug eruption

D. Lichen planus

E. Pustular Psoriasis

a. A 35-year-old male with erythematous papules and pustules on the face and back for 1 month while taking prednisolone suggests an acneiform eruption, which is a known side effect of corticosteroids. Steroid-induced acne typically presents with monomorphic papules and pustules without comedones.

4. A 9 yrs old boy presents with redness, itching and raised patches on body for the last 2 days. The rash disappears within few hours leaving no scar. He has been prescribed amoxicillin by GP 3 days back.

What is single most likely diagnosis?

A. Acute urticaria

B. Angioedema

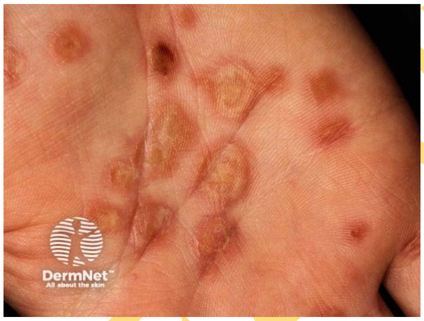
C. Erythroderma

D. Morbiliform drug eruption

E. Urticarial vasculitis

a. A 9-year-old boy with redness, itching, and raised patches that disappear within hours without scarring after taking amoxicillin suggests acute urticaria, which is a common hypersensitivity reaction to medications. It is characterized by transient wheals and pruritus without lasting skin changes.

5. A 31 yrs old male presents with fever, arthralgia, myalgia, conjunctivitis and skin lesions. There are vesicles on buccal mucosa, genital area and conjunctiva. There are target lesions on palms. He has been taking Cotrimoxazole for the last 5 days. What is the most likely diagnosis?



A. Erythroderma

B. Lichenoid drug eruption

C. Psoriasiform drug eruption.

D. Rieters syndrome

E. Steven Johnson syndrome

e. A 31-year-old male with fever, arthralgia, myalgia, conjunctivitis, vesicles on mucosa and genitals, and target lesions on the palms after taking Cotrimoxazole suggests Stevens-Johnson Syndrome (SJS). SJS is a severe drug reaction with mucosal involvement and skin detachment, requiring urgent medical attention.

6. A 35 yrs old man presents with very itchy, polygonal, flat topped papular lesion 2-5 mm in diameter affecting flexor surfaces, palms, soles, membranes and genitalia symmetrical pattern. He is taking anti-tuberculosis treatment for the last 15 days. What is the single most likely causative drug?

mucous

A. Ethambutol

B. Isoniazid

C. Pyrazinamide

D. Rifampicin

E. Streptomycin

b. A 35-year-old man with intensely itchy, polygonal, flat-topped papules affecting the flexor surfaces, palms, soles, mucous membranes, and genitalia in a symmetrical pattern suggests drug reaction, which can be triggered by certain medications, including Isoniazid.

7. A 29 yrs old male presents with recurrent round purplish plaques on the same sites whenever he takes tab. Cotrimoxazole.

What is the single most likely diagnosis?

A. Atopic dermatitis

B. Eczematous drug eruption

C. Fixed drug eruption

D. Lichenoid drug eruption

E. Recurrent urticaria

c. A 29-year-old male with recurrent round purplish plaques appearing at the same sites whenever he takes Cotrimoxazole suggests a Fixed Drug Eruption (FDE). FDE is characterized by recurrent hyperpigmented plaques at the same location upon drug re-exposure.

8. A 39 year old male presents with well demarcated erythematous plaques topped by silvery scales. He is taking anti hypertensive drug for the last few days. What is the single most likely causative drug?

A. Amlodipine

B. Atenolol

C. Lisinopril

D. Losartan

E. Verapamil

b. A 39-year-old male with well-demarcated erythematous plaques topped by silvery scales suggests psoriasiform drug eruption, which can be triggered by beta-blockers like Atenolol. Beta-blockers are known to exacerbate or induce psoriasis-like eruptions.

9. A 57 yrs old male presents with itchy, dry rash which started in patches 6 days ago and gradually spread all over the body with in a day. He also has fever with rigors.

What is most appropriate treatment option?

A. Chlorpheneramine and recall after 24 hrs

B. IV acyclovir 800 mg 5 times a day

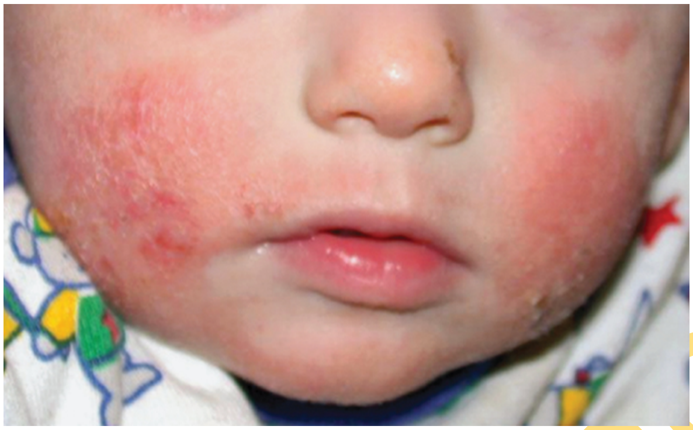
C. IV Hydrocortisone every 6 hours

D. SC adrenaline and 1 L ringer's lactate

E. Urgent referral for admission

e. A 57-year-old male with a rapidly spreading itchy rash all over the body within a day, along with fever and rigors, suggests a severe drug reaction such as erythroderma, Stevens-Johnson Syndrome (SJS), or Toxic Epidermal Necrolysis (TEN), which requires urgent hospital admission for monitoring and supportive care.

10. A 3 years old asthmatic child presents with itchy lesions on the face for the last 2 months. There are multiple small vesicles on the face with dryness of skin and secondary infection. What is the most likely diagnosis?



A. Atopic eczema

B. Herpes simplex

C. Impetigo

D. Scabies

E. Seborrhic dermatitis

a. A 3-year-old asthmatic child with itchy facial lesions for 2 months, small vesicles, dryness, and secondary infection suggests atopic eczema, which is commonly associated with asthma (part of the atopic triad). Secondary bacterial infection (commonly with Staphylococcus aureus) can complicate eczema.

11. A 3 yrs old child with atopic eczema presents with lichenified itchy skin lesions over body. What is the single best treatment option?

A. Antibiotics

B. Dietary manipulations

C. Oral retinoid

D. Tar bandages

E. Wet wrappings

e. Wet wrapping therapy is the single best treatment option in this scenario because it provides enhanced moisturization and occlusion, thereby reducing itching and lichenification while improving the penetration of topical treatments.

12. A 16 yrs old girl presents with itchy swellings on body and shortness of breath for the last 4 hours after eating peanut cake.

What is the most appropriate treatment?

A. Loratidine

B. Chlorpheneramine zaction

C. Prednisolone

D. Adrenaline

E. Fexophenadine

d. A 16-year-old girl with itchy swellings (urticaria) and shortness of breath after eating peanut cake suggests anaphylaxis, a life-threatening allergic reaction requiring immediate intramuscular (IM) adrenaline as the first-line treatment. Antihistamines and steroids may be used as adjuncts, but adrenaline is the priority.

13. A 23 yrs old man presents with itchy swellings on body for the last 8 months. Individual swelling lasts less than 24 hours leaving no scar. No cause has been found.

Wheals are in the form of papules and plaques. What is likely diagnosis?

A. Acute urticaria

B. Angioedema

C. Chronic urticaria

D. Erythema multiforme

E. Psoriasis

c. Spontaneous weals ± angio-oedema. Individual weals lasting 2–24h and more than 6 weeks duration suggests Chronic urticaria. OHGP 5th Ed Page 587

14. A 35 yrs old lady presents with recurrent burning and painful swelling on body for the last 7 months. Individual wheals last more than 24 hours and leaves bruising What is the most likely diagnosis?

A. Chronic urticaria

B. Chronic eczema

C. Thrombocytopenic purpura

D. Lichen planus

E Vasculitis

e**.** Individual weals last >24h; lesions are burning/painful rather than itchy; and/or lesions leave scaling, bruising, purpura/petechial haemorrhages. Suspect if relentless rather than self-limiting urticaria. *Other features*: joint pains, fever and/or malaise. Refer. Diagnosis is confirmed by skin biopsy. *Specialist treatment*: steroids and/or immunosuppressive agents**.** OHGP 5th Ed Page 587

15. 19 Yrs old girl presents with black dots and red papules on face and back for the last 6 months. What is most appropriate initial treatment?

A. Topical Metronidazole

B. Oral Minocycline

C. Oral Clindamycin

D. Oral retinoid

E. Topical Benzoyl peroxide

e. 19 Yrs old girl presents with black dots and red papules on face and back for the last 6 months suggests Mild Acne, Treatment of choice for mild comedonal acne is Topical retinoids ± Topical benzoyl peroxide

16. A 19 years old lady comes for advice about contraception and treatment of her acne. She has tried topical treatments for 12 weeks, but no relief.

What is single best treatment option?

A. Cyproterone acetate

B. Progesterone injection

C. Progesterone Only Pill

D. Oral Norethisterone

E. Combined Oral Contraceptive pills

a. Cyproterone acetate (co-cyprindiol) Licensed for treatment of acne, not for contraception, but does provide contraception. Use for 3mo after acne control is achieved. Associated with 4× ↑ risk of venous thromboembolism compared to COC containing levonorgestrel. OHGP 5th Ed Page 730

17. A 19 yrs male with acne is having papules, pustules, nodular abscesses and wide spread scarring. He has applied topical treatment and took oral antibiotics for 8 weeks. Acne relapses after discontinuing treatment. What is the single best treatment option?

A. Cyproterone acetate

B. Derm abrasion

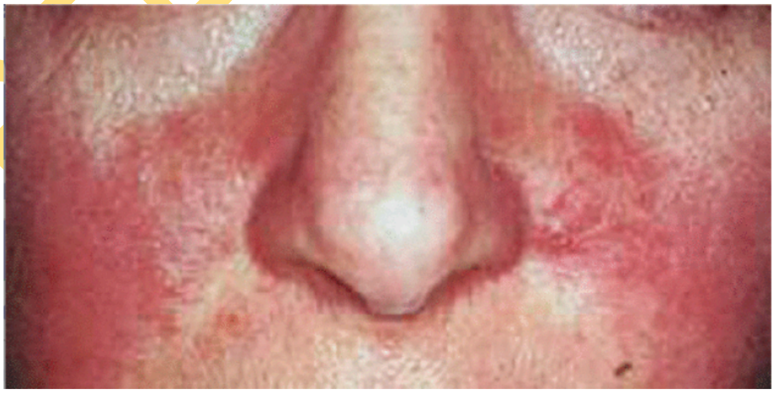
C. Laser therapy

D. Oral Retinoids

E. Repeat antibiotics

d. A 19-year-old male with severe nodulocystic acne, scarring, and relapse after topical and oral antibiotic therapy requires oral retinoids (isotretinoin), which is the most effective treatment for severe or persistent acne. Isotretinoin reduces sebaceous gland activity, inflammation, and scarring, but requires monitoring due to potential side effects.

18. A Middle aged female is having erythema and pustules on the face for the last five months. Earliest symptom was flushing. There is erythema, telangiectasia, papules, pustules and lymphoedema affecting cheeks, nose, forehead and chin. Lesions exacerbate by sun light and topical steroids. What is most likely diagnosis?



A. Acne vulgaris

B. Contact dermatitis

C. Rosacea

D. SLE

E. Seborrheic dermatitis

c. A middle-aged female with persistent erythema, pustules, telangiectasia, and flushing on the face, worsening with sunlight and topical steroids, suggests rosacea, a chronic inflammatory skin condition affecting the central face. Triggers include sunlight, heat, alcohol, and spicy foods, and treatment involves topical metronidazole or ivermectin, with oral tetracyclines for moderate-severe cases.

19. A 17 year old male presents with rash on body for the last few days. There are multiple oval pink lesions having delicate collarets of scales preceded by single large oval lesion 2-5 cm diameter after several days. What is the single most likely diagnosis?

A. Erythema multiforme

B. Guttate psoriasis

C. Pityriasis rosea

D. Pityriasis versicolor

E. Secondary syphilis

d. A 17-year-old male with multiple oval pink lesions with delicate collarettes of scale, preceded by a single large "herald patch" suggests Pityriasis Rosea, a self-limiting viral exanthem. It follows a "Christmas tree" pattern on the trunk and typically resolves within 6–8 weeks without scarring.

20. A young Sri Lankan adult is having numerous small slightly hypo pigmented scaly patches on the trunk for the last few months.

What is likely diagnosis?

A. Pityriasis alba

B. Pityriasis versicolor

C. Psoriasis

D. Seborrheic dermatitis

E. Vitiligo

b. Pityriasis alba - Finely scaled white patches on face or arms. Affects children/young adults. Associated with atopy. Usually no treatment is required. Resolves spontaneously over months or years. If severe, refer to dermatology for confirmation of diagnosis. Treatment for severe cases is with topical steroids and/or PUVA. OHGP 5th Ed Page 597

21. A 35 yrs old male complains of very itchy lesions on body for the last few weeks. There are purple flat topped small lesions 2-5 mm in diameter affecting flexor surfaces, palm, soles, mucous membranes and genitalia. Papules have surface network of white lines. What is most likely diagnosis?

A. Guttate psoriasis

B. lichen sclerosis

C. lichen simplex

D. lichen planus

E. Pityriasis versicolor

d. Lichen planus - Very itchy, polygonal, flat-topped papular lesions 2–5mm diameter affecting flexor surfaces, palms/soles, mucous membranes (two-thirds), and genitalia in a symmetrical pattern. Koebner phenomenon (lesions occur in the line of damaged skin due to a scratch is exhibited. Papules may have a surface network of white lines (Wickham's striae). OHGP 5th Ed Page 594

22. A 36 yrs old female presents with fever and painful nodules on legs for the last 3 weeks. There are tender erythematous nodules 1-5 cm in diameter on shins. What is most likely associated condition?

A. Sarcoidosis

B. Erythroderma

C. Erythema multiforme

D. Erythema ab igne

E. Pemphigoid

a. Erythema nodosum - Tender erythematous nodules 1–5cm diameter on extensor surfaces of limbs—especially shins) ± ankle and wrist arthritis ±fever. Resolves in <8wk; non-scarring. No treatment needed; analgesia and mild compression may ease symptoms. Associations - 20% of cases are idiopathic with no associations. Streptococcal infection, Drugs, e.g. oral contraceptives, sulfonamides, Acute sarcoidosis, Inflammatory bowel disease—UC, Crohn's, Malignancy, TB. OHGP 5th Ed Page 568

23. A 32 yrs old male presents with skin lesions in axilla and groins for the last 4 yrs. There are nodules, abscesses, cysts, sinuses and result in scarring. What is single likely diagnosis?

A. Nodulo pustular Acne

B. Hidradenitis suppurativa

C. Tuberculous adenitis

D. Pyoscabies

E. Plague

b. Hidradenitis suppurativa - Chronic, autoimmune, inflammatory condition of sweat glands in axilla, groin, and perineum. May be a family history. Nodules, abscesses, cysts, and sinuses form → scarring. Treat with topical antiseptics (e.g. 4% chlorhexidine wash) or antiseptic emollients (e.g. Dermol 500® lotion), systemic antibiotics (e.g. lymecycline 408mg od), ± surgical drainage/excision. Refer to dermatology if these measures fail. OHGP 5th Ed Page 575

24. A 31 yrs old lady presents with excessive growth of hair on face and trunk for the last many months. She is using some drug.

Which is the most likely causative drug?

A. Metoprolol

B. Domperidone

C. Mafenamic Acid

D. Phenytoin

E. Ranitidine

d. A 31-year-old woman with excessive hair growth on the face and trunk (hirsutism) that developed over months and is associated with drug use is most likely due to Phenytoin. This anticonvulsant is known to cause hirsutism as a side effect.

25. A 21 yrs old lady is having growth of hair on chin since puberty. She has regular menstrual cycles. Her physical examination is normal. Which is most appropriate step in management?

A. Referral

B. Reassurance

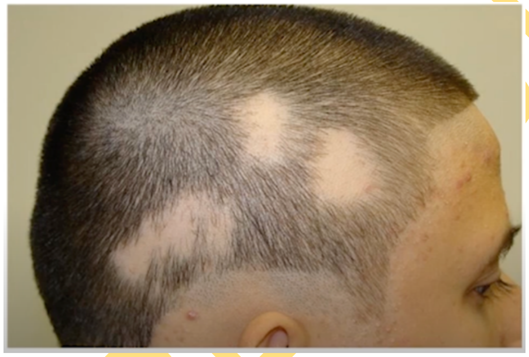
C. Thyroid function tests

D. Hormone essays

E. Ultrasound pelvis

b. A 21-year-old lady with chin hair growth since puberty, regular menstrual cycles, and normal physical examination is likely experiencing physiological hirsutism, which is common and does not indicate an underlying pathology. The most appropriate management is reassurance.

26. A 42 yrs old male presents with two patches of hair loss on scalp and beard for one year. The skin of lesions is smooth and shiny. His brother had similar problem 5 years back. What is most appropriate step?



A. Skin biopsy

B. Serum testosterone

C. Reassurance

D. Dapsone

E. Skin scraping

c. The 42-year-old male with smooth, shiny patches of hair loss on the scalp and beard, along with a family history of similar issues, suggests Alopecia Areata, an autoimmune condition. The appearance is diagnostic, and no further investigations are usually required unless atypical features are present. The most appropriate step is reassurance, as it often resolves spontaneously, although treatment with topical or intralesional steroids may be considered for faster regrowth.

27. A 28 years old male presents with fever and excessive sweating all over the body for the last 5 days. He has returned from Nigeria a week ago. Past history is unremarkable. What is single most likely cause?

A. Bacterial infection

B. Leukaemia

C. Malaria

D. Leukemia

E. Viral infection

c. A 28-year-old male with fever and excessive sweating after returning from Nigeria is most likely to have malaria, a common cause of fever in travelers returning from endemic regions. Malaria should be ruled out immediately with a blood smear for malaria parasites or rapid diagnostic tests.

28. A 4 years old girl presents with fever, runny nose, cough and skin rash. The rash is vesicular, has erythematous base and is distributed mostly on trunk and face.

How will you treat her?

A. Acyclovir tablets

B. Topical acyclovir

C. Paracetamol

D. Cloxacillin

E. Meclizine

c. A 4-year-old girl with fever, runny nose, cough, and a vesicular rash on an erythematous base primarily on the trunk and face likely has chickenpox (varicella). Management is usually supportive with paracetamol to reduce fever and discomfort. Antiviral therapy like acyclovir is typically reserved for severe cases or immunocompromised children.

29. A 14 years old shoe polish boy presents with a 4 cm patch since 2 months which is hypo pigmented and painless. There is no other similar lesion on the body.

Which single clinical sign would be most significant in diagnosis?

A. Skin scrapings

B. Use magnifying glass

C. Auspitz sign

D. Sensations

E. Palpation of lesion

d. A 14-year-old boy with a painless, hypopigmented patch lasting for 2 months raises suspicion for leprosy (Hansen's disease). The most significant clinical sign for diagnosis is to check for loss of sensations (touch, pain, or temperature) over the lesion, as this is a hallmark feature of leprosy.

30. A 34 years old woman presents with a 4 cm plaque on her left cheek since 1 month. She also has cough, weakness, joint pains and swellings, bruises, mouth ulcers and sensitivity to sun light. The lesion is round, mildly raised, erythematous, with minimal scaling and is non tender.

What is the most likely diagnosis?

A. Lapromatous Leprosy

B. Sarcoidosis

C. Discoid lupus

D. Tuberculosis

E. Fixed drug eruption

c. Discoid lupus well-defined, red, round/oval plaques on the face, scalp, or hands. Scarring may ← scalp alopecia and skin hypopigmentation. Internal involvement is not a feature. Confirm with lesion biopsy. Investigate with an autoimmune profile as for SLE. Treat with potent topical steroids and sunscreen.

31. A 5 years old girl presents with history of mild fever, cough, and runny nose. There is diffuse maculopapular rash on face, neck and trunk The child is active otherwise. There are bilateral occipital lymph nodes present.

What is the most likely diagnosis?

A. Measles

B. Rubella

C. Chicken pox

D. Drug eruption

E. Infectious mononucleosis

b. A 5-year-old girl with mild fever, cough, runny nose, a diffuse maculopapular rash on the face, neck, and trunk, along with bilateral occipital lymphadenopathy, is most likely to have Rubella. Occipital and postauricular lymphadenopathy is a hallmark feature of Rubella, distinguishing it from measles and other conditions.

32. A 6 years old girl presents with superficial round, *yellow crusted lesions* on the face which are formed after the rupture of thin walled blisters. These lesions are enlarging and spreading rapidly.

What is the best topical treatment option?

A. Acyclovir

B. Fusidic acid

C. 1% Hydrocortisone Impetigo

D. Neomycin

E. Terbinafine

b. A 6-year-old girl with superficial yellow-crusted lesions on the face, spreading rapidly after rupturing thin-walled blisters, likely has impetigo, a bacterial skin infection commonly caused by Staphylococcus aureus or Streptococcus pyogenes. The best topical treatment is Fusidic acid, which is effective against these bacteria.

33. A 45 yrs old lady presents with swollen, painful area discharging pus from several points on the back of neck for 6 days. She is diabetic. What is single most appropriate treatment?

A. Cap Flucloxacillin and daily dressing

B. Ciprofloxacin and Metronidazole

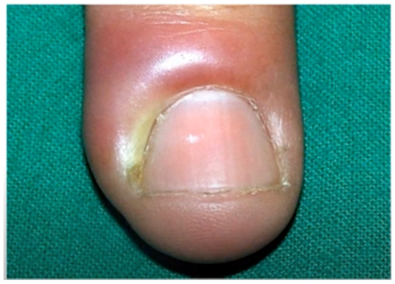
C. Cloxacillin and debridement

D. Co-amoxiclav for 48 hours

E. Warm compresses and daily dressing

c. A 45-year-old diabetic lady with a swollen, painful area discharging pus from several points suggests a carbuncle or severe skin infection, which requires both systemic antibiotics and possibly surgical drainage. In a diabetic patient, prompt treatment is crucial to prevent complications like abscess formation or sepsis. The best option is Cloxacillin (effective against Staphylococcus aureus) along with debridement to manage the infection.

34. A 37 years old lady presents with swelling on middle finger of left hand for 3 days. The skin and soft tissue of proximal and lateral nail fold are red, hot and tender, nail is discolored. What is most likely diagnosis?



A. Acute paronychia

B. Nail fold telangiectasia

C. Onycholysis

D. Onychomycosis

E. Staph whitlow

a. Acute Paronychia - Infection of the skin and soft tissue of the proximal and lateral nail fold, most commonly caused by *Staph. aureus*. Often originates from a break in the skin or cuticle as a result of minor trauma, e.g. nail biting. Skin and soft tissue of the proximal and lateral nail fold are red, hot, and tender; nail may appear discoloured/distorted. OHGP 5th Ed Page 607

35. A 23 Yrs old male presents with skin lesions on left lower leg preceded by fever, flu like symptoms for 2 days. There is painful, tender red area with well defined edges and there is obvious blister in the red area. What is most likely diagnosis?

A. Cellulitis

B. Erysipelas.

C. Folliculitis

D. Impetigo

E. Necrotizing fasciitis

b. Erysipelas - Acute infection of the dermis. Often preceded by fever/'flu-like' symptoms. Usually affects face/lower leg. Appears as a unilateral, painful, tender, reddened area with a well-defined edge. Often the area is swollen and may blister. May be an obvious entry wound. OHGP 5th Ed Page 606

36. An infant presents with skin lesions for 4 days followed by impetigo. Child is *toxic* with shedding of sheets of skin. What is best treatment option

A. Admission

B. Antibiotics

C. Antivirals

D. Reassurance

E. Steroids

a. An infant with skin lesions, impetigo, and systemic toxicity with skin shedding likely has staphylococcal scalded skin syndrome (SSSS), a severe condition caused by Staphylococcus aureus exotoxins. This requires urgent admission for IV antibiotics, supportive care, and monitoring for complications.

37. A 9 Years old girl presents with multiple grouped lesions on face, trunk and neck for 2 months. There are discrete pink papules1-3 mm in diameter with a small depression in the center. What is the most likely outcome of this condition if untreated?

A. Cellulitis

B. Fissuring

C. Impetigo

D. Recovery

E. Sarring

d. Childhood molluscum presents as discrete pearly pink, umbilicated papules 1–3mm diameter. If squeezed, papules release a cheesy material. Lesions are multiple and grouped—usually on the trunk, face, or neck. Untreated lesions resolve spontaneously after 12–18mo. Treatment is not needed. Seek specialist advice if immunocompromised. OHGP 5th Ed Page 609

38. A 28 years old veterinary doctor presents with painful pustule on right hand for ten days. There was initially solitary red rapidly growing about 1 cm in diameter that evolved into purple pustule. What is most likely diagnosis?

A. Furuncle

B. Ring worm

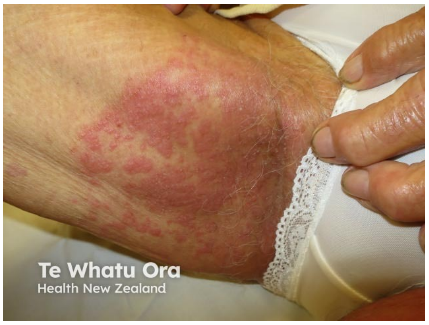
C. Orf

D. Wart

E. Pyoderma gangrenosum

c. Orf is Solitary, red, rapidly growing papule <1cm diameter—often on a hand. Evolves into a painful, purple pustule. There is usually a history of close contact with sheep (e.g. vet, farmer), or cows (when termed *milker's nodule*). *Cause*: parapox virus. *Incubation*: 76d. Resolves spontaneously in 2–4wk. Complications include 2° infection (treat with topical/systemic antibiotics); erythema multiforme; lymphangitis. OHGP 5th Ed Page 609

39. A 24 years old navy officer presents with itching and skin rash in groins for 2 weeks. There is reddened moist glazed area in inguinal regions.



What is single likely diagnosis?

A. Cellulitis

B. Intertrigo

C. Psoriasis

D. Seborrheic dermatitis

e. Intertrigo presnets with Reddened, moist, glazed area in the submammary, inguinal, or axillary folds. In wet workers may occur between digits. Patients may present with skin changes and/or itch. OHGP 5th Ed Page 610

40. A 9 month old infant presents with poor feeding and sore mouth for 3 days. There are white plaques visible on *buccal mucosa* which can be easily wiped off. What is likely diagnosis?

A. Epithelial dysplasia

B. Herpes simplex

C. Leucoplakia

D. Lichen planus

E. Oral thrush

e. Oral thrush presents with Sore mouth; poor feeding in infants. Most common in babies, patients with poor oral hygiene, or the elderly with false teeth. White plaques visible on buccal mucosa which can be wiped off ± angular stomatitis. OHGP 5th Ed Page 610

41. A 35 years old lady presents with itching and vaginal discharge for 2 months. Vulva and vagina are sore and there is *cheesy vaginal discharge*. Husband has no symptoms. What is best option regarding her husband's?

A. Treat with Azithromycin Candidiasis

B. Treat with clotrimazole cream

C. Treat with Metronidazole

D. Treat with fluconazole

E. Treatment has no proven benefit

b. Most lilkey diagnosis in this case is vaginal candiaisis and there is no benefit from treating the partner unless overt infection. OHGP 5th Ed Page 713

42. An 18 years old male presents with skin lesion on chest and arms for 2 weeks. There are multiple plaques with scaling and erythema at edges and *clear in centre*. The lesion is enlarging slowly. What is likely diagnosis?

A. Discoid eczema

B. Pityriasis rosea

C. Psoriasis

D. Tinca corporis

E. Tinea cruris

d. Tinea corporis (also known as ringworm) is a fungal infection that presents as Single/multiple plaques with scaling and erythema especially at the edges. Lesions enlarge slowly and clear centrally (hence ‘ringworm’). OHGP 5th Ed Page 611

43. A 15 years old male presents with skin lesions in groin for 2 weeks. There are red plaques with scaling at edges.

What is the single likely diagnosis?

A. Candidiasis

B. Erythrasma

C. Intertrigo

D. Tinea corporis

E. Tinea cruris

e. Tinea cruris, also known as jock itch, is a fungal infection that affects the groin area. It is Associated with tineapedis. Involves upper thigh (+ scrotum rarely). Red plaque with scaling especially at the edge

44. A 16 years old swimmer presents with itching on feet for 1 month. There is maceration between toes. What is the most appropriate treatment option?

A. Fluconazole single dose of 150 mg

B. Grisofulvin for 2 weeks

C. Itraconazole for 6 months

D. Ketoconazole for one week

E. Terbinafine for 2 weeks

e. The presentation of itching on the feet and maceration between the toes is most consistent with athlete's foot (tinea pedis), which is a fungal infection caused by dermatophytes. The most effective treatment for tinea pedis is typically an oral antifungal like terbinafine, which is given for 2 weeks. Terbinafine is a first-line oral treatment for fungal infections of the skin, particularly in tinea pedis.

45. A 39 years old woman presents with lesions on the scalp for 2 months. There are well defined inflamed areas of hair loss with broken hair shafts. What is the likely diagnosis?

A. Alopecia areata

B. Kerion

C. Scalp Psoriasis

D. Seborrheic dermatitis

E. Tinea capitis

d. The description of well-defined inflamed areas of hair loss with broken hair shafts is most consistent with tinea capitis, a fungal infection of the scalp. The infection leads to hair loss, often with broken hair shafts, and inflammation. It is commonly seen in children but can also affect adults. It often presents with scaly, itchy, and sometimes painful areas on the scalp.

46. A 34 years old housewife presents with nail deformity. There are thickened yellow nails. This started at the distal end and spread proximally to involve whole nail.

Which baseline test would you advise in order to start oral treatment?

A. CBC

B. Creatinine

C. ESR

D. SGPT(ALT)

E. TSH

d. It recommends that for other people, liver function tests (LFTs) should be performed. Hepatotoxicity may occur in people with and without pre-existing hepatic disease, therefore periodic monitoring of LFTs (after 4–6 weeks of treatment) is recommended. Terbinafine should be stopped immediately if LFTs are deranged

47. A middle aged male presents with skin lesions check on face for 2 months. There is a small ulcer with pearly rolled edge. It started as a small Ass nodule which necrosed centrally to give this picture. Which is the most likely diagnosis?

A. Basal cell carcinoma

B. Leishmaniasis

C. Malignant melanoma

D. Squamous cell carcinoma

E. Tenea facialis

a. Basal cell carcinoma (BCC) is the most likely diagnosis given the presentation of a small ulcer with a pearly rolled edge and necrosis in the center. BCC is the most common type of skin cancer and typically presents as a painless nodule that may ulcerate and form the characteristic rolled edges. It often occurs on sun-exposed areas like the face and grows slowly.

48. A 24 years old pregnant female presents with intense itching all over the body for 1 week. There are multiple papules with excoriations on sides of fingers, wrists and ankles. Other family members also have same problem. What is the single best treatment option for this patient?

A. Benzyl benzoate

B. Crotamitone

C. Lindaine

D. Malathion

E. Permethrin

e. The symptoms described — intense itching, papules, excoriations, and family involvement — suggest scabies, a condition caused by the Sarcoptes scabiei mite. Permethrin 5% cream is the first-line treatment for scabies and is safe for use during pregnancy. It works by killing the mites and their eggs.

49. A 6 years old child presents with skin lesion after insect sting 8 hour back. There is small papule at the site of sting and no other local a reaction or anaphylaxis noted. What is best treatment option?

A. 1% hydrocortisone

B. Chlorpheniramine maleate

C. Co-amoxiclave

D. Reassurance

E. Tetanus toxoid

d. In the case of a local skin lesion following an insect sting without any significant systemic reaction or anaphylaxis, the best treatment is typically reassurance. This is because mild reactions, such as a small papule at the site of the sting, generally resolve on their own without the need for further medical intervention.

50. A mother brings a 7 years old girl presents with itching on scalp for 15 days. There are nits, eggs and live lice in scalp hair.

What is the most appropriate first line treatment option?

A. Benzyl benzoate

B. Carbaryl

C. Crotamitone

D. Permethrin

E. Melathione

d. Permethrin 1% is the most appropriate first-line treatment for head lice (pediculosis capitis) in children. It is a topical treatment that effectively kills live lice and nits (eggs) and is generally safe for use in children over 2 months of age.

51. A 27 years old pregnant female presents with itching on scalp for 15 days. There are nits, eggs and live lice in scalp hair.

What is the most appropriate treatment option?

A. Benzyl benzoate

B. Carbaryl

C. Crotamitone

D. Permethrin

E. Dimeticone

e. If pregnant/breastfeeding, treat with wet combing or dimeticone. OHGP 5th Ed Page 612

52. A 23 years old man presents with fever and *blackening of right thigh* for 3 days after an accidental injury one week ago. There is ill defined redness and sloughing. What is the most likely diagnosis?

A. Carbuncle

B. Cellulitis

C. Erysipelas

D. Gas gangrene Infection

E. Necrotising fasciitis

e. Life-threatening soft tissue infection. Usually occurs in otherwise healthy individuals after surgery/ trauma (often minor). ill-defined erythema + high fever. The wound rapidly becomes necrotic. Admit as an emergency for IV antibiotics ± surgery. OHGP 5th Ed Page 607

53. A 29 years old male presents with skin lesions on the right lower leg for 2 days. He is diabetic for last 3 years and used topical steroid for itching on leg for the last 4 weeks. There are multiple small pustules on affected area. What is the most likely diagnosis?

A. Acneform eruption

B. Carbuncle

C. Cellulitis

D. Folliculitis

E. Furuncle

d. Superficial infection of the hair follicles usually caused by Staph. aureus. Presents as pustules in hair bearing areas, e.g. legs, beard area. Risk factors: obesity, DM, occlusion from clothing, topical steroid use. OHGP 5th Ed Page 607

54. A 58 years old farmer presents with a lesion on face for 5 months. There was a nodule that progressed to ulcerate and form crust. Edges are not rolled.

What is likely diagnosis?

A. Basal cell carcinoma

B. Leshmaniasis

C Malignant melanoma

D. Squamous cell carcinoma

E Tenea facialis

d. The description of a nodule that ulcerates and forms a crust, with no rolled edges, is most consistent with squamous cell carcinoma (SCC). SCC often develops in sun-exposed areas and presents as a rough, scaly patch that can progress to an ulcer with raised, non-rolled edges. The patient's occupation as a farmer suggests exposure to UV radiation, which is a significant risk factor for SCC.

55. A 23 years old male presents with multiple dome shaped papules with papilliferous surface on hands for one month. What is likely diagnosis?

A Common warts

B. Molluscum contagiosum

C. Orf

D. Plane warts

E. Pompholyx

a. Common warts (also known as verruca vulgaris) typically present as Dome shaped papules with papilliferous surface. Usually >1. Most common on hands but may affect other areas. In children 30–50% disappear spontaneously in <6mo. OHGP 5th Ed Page 608

56. A 3 years old child presents with fever, cough, runny nose, redness of eyes for 5 days and skin rash for day. There are tiny white spots on bright red background on buccal mucosa of cheeks and florid maculopapular rash over the body. Lymph nodes are also enlarged. What is likely diagnosis?

A. Common cold

B. Glandular fever

C. Measles

D. Rubella

E. Scarlet fever

c. The presence of fever, cough, runny nose, redness of eyes, and a florid maculopapular rash along with tiny white spots (Koplik spots) on the buccal mucosa (cheeks) strongly points to measles. Koplik spots are considered pathognomonic for measles and typically appear before the rash. The enlarged lymph nodes further support this diagnosis.

57. A 30 years old lady presents with painful swelling of finger for one day. She is taking treatment for *acute paronychia* on same finger. The finger pulp is red, hot edematous and exquisitely tender. Onset of pain is rapid and there is swelling of entire finger pulp. What is most appropriate treatment option?

A. Admission

B. Hot compresses

C. Needle aspiration

D. Oral antibiotics

E. Topical Fluidic acid

a. Staphylococcal whitlow (felon) - nfection involving the bulbous distal pulp of the finger following trauma or extension from an acute paronychia. The finger bulb is red, hot, oedematous, and usually exquisitely tender. Onset of pain is rapid and there is swelling of the entire finger pulp. Management:

- If fluctuant Admit for drainage and antibiotics
- If non-fluctuant Elevate, apply moist heat (e.g. soak in hot water), and treat with oral antibiotics; if this fails, admit for incision and drainage. OHGP 5th Ed Page 607

58. A 18 years old college student presents with a non healing wound on right middle finger since, 2 weeks after a minor injury. There is crusted beefy red nodule which bleeds on touching What is the most appropriate step in management?

A. Bleeding profile

B. Cryotherapy

C. Excision biopsy

D. Skin biopsy

E. Topical podophyllin

c. Pyogenic granuloma - Bright red/blood crusted nodule that bleeds easily. Typically at the site of trauma (e.g. small cut) and enlarges rapidly over 2–3wk. Usually occurs in children/young adults. Most common site: finger.

Management

- Pregnant women May disappear spontaneously after delivery
- Other patients Curettage and cautery, or excision. Send for histology to exclude malignancy. OHGP 5th Ed Page 601

59. An *11* year *old* Afro-Caribbean has a boggy pustular, in-durated *plaque on his scalp*.

A. Furunculous

B. Granuloma annulare

C. Kerion

D. Scalp abscess

E. Scalp psoriasis

c. Scalp infection If kerion (pustular boggy mass) is suspected, refer to dermatology. OHGP 5th Ed Page 611

60. A 38 years old obese man presents with velvety, Hyperpigmented, papillomatous lesions sugar is 128 mg/dl.

What is the most likely diagnosis?

A. Acanthosis nigricans

B. Hidradenitis suppurativa

C. Seborrheic keratoses

D. Tenea corporis

E. Verruca vulgaris

a. Acanthosis nigricans is characterized by velvety, hyperpigmented, and papillomatous lesions, typically found in skin folds such as the neck, axillae, and groin. It is often associated with insulin resistance, which is common in obese individuals. The elevated blood sugar level (128 mg/dL) also supports the possibility of insulin resistance, which is a key factor in the development of acanthosis nigricans.

61. A 45 years old man presents with generalized itching, nausea and weakness since four weeks. He also complains of indigestion and diarrhea.

His lab reports show

Total bilirubin 7 mg/dl

Direct bilirubin 1 mg/dl

Indirect bilirubin 6 mg/dl

SGPT 65 Units/L.

Alkaline phosphates 2400 Units/L

What is the most likely diagnosis?

A. Ascending cholangitis

B. Autoimmune hepatitis

C. Ca head of pancreas

D. Gall stones ileus

E. Viral hepatitis

c. The patient presents with generalized itching, nausea, weakness, indigestion, and diarrhea, along with lab findings showing significantly elevated alkaline phosphatase (2400 U/L), which suggests obstructive jaundice. The elevated direct bilirubin (1 mg/dL) and indirect bilirubin (6 mg/dL) further point to cholestasis or bile duct obstruction. The SGPT is mildly elevated (65 U/L), which is consistent with liver involvement but does not indicate a primary liver disease like hepatitis.

DISTINGUISHING DIFFERENT TYPES OF JAUNDICE

	Pre-hepatic	**Hepatic**	**Cholestatic**
Bilirubin	↑↑	↑↑	↑↑
AST / ALT	Normal	↑↑	↑
Alkaline Phosphatase	Normal	↑	↑↑↑
Hemoglobin (Hb)	↓	Normal	Normal
Jaundice Appearance	Mild, lemon yellow	May be marked	May be marked
Other Symptoms	Urine is not darkened	Tender, enlarged liver	Enlarged liver, itching skin, pale stools

62. 8-month-old infant is brought to your office by his mother for assessment of a diaper rash. On examination, the infant has an intensely erythematous diaper rash has a scalloped border and sharply demarcated edge. There are numerous "*satellite lesions*" present on the lower abdomen and thighs. What is the most likely diagnosis in this infant?

A. Allergic contact dermatitis

B. Atopic dermatitis

C. Candidal diaper dermatitis

D. Infectious eczematoid dermatitis

E. Seborrheic dermatitis

c. Candidiasis - Frequently complicates nappy rash or infantile seborrhoeic eczema. Erythema, scaling, and pustules involve the flexures. There may be associated satellite lesions. Treatment is with a topical antifungal, e.g. clotrimazole. OHGP 5th Ed Page 883

HEMATOLOGY

1. A mother brings blood report of her 5 years old child showing Hb 7.5 g/dl, MCV-70fL, RBC-Microcytic, hypochromic. What is the most appropriate treatment?

A. Ferrous Sulphate

B. Folic Acid

C. Vit.B12

D. Fresh Fruits

E. Blood Transfusion

a. Iron deficiency anaemia - Red blood cells are microcytic (↓ MCV) and hypochromic. Low serum ferritin and/or low transferrin saturation confirms iron deficiency. Treat underlying cause where possible. Give iron supplements, e.g. ferrous sulphate 200mg bd po—may turn stools black and cause constipation. If not tolerated, try lower dose or alternative preparation, e.g. ferrous fumarate. Fruit juice rich in vitamin C taken with the iron may ↑ iron absorption. Hb should ↑ by 1g/dL/wk—confirm response 2–3wk after starting treatment. Continue treatment for 3mo after correction of deficiency to replenish iron stores. Once blood count is normal, monitor Hb, MCH, and MCV every 3mo for 1y and then annually.

2. A mother brings blood report of her two years old child which shows Hb 6mg/dl, MCV 69fl, Ferritin 9mg/ml (7-140g/dl), TIBC 200mg/dl (100-400mg/dl). What would you advise?

A. Ferrous Sulphate

B. Folic Acid

C. Refer

D. Iron Rich Diet

E. Vit.B12

c. Refer for thalassemia evaluation. In this patient, Hb 6g/dL - Severe anemia, MCV 69 fL – Microcytic anemia, TIBC 200 mg/dL: ruling out iron deficiency.

3. A 45 years old lady is having menorrhagia for the last one year. Her MCV would be which one of the following?

A. 5 fl

B. 85 fl

C. 95 fl

D. 105 fl

E. 110 fl

a. 5 fl. Menorrhagia (excessive menstrual bleeding) over a prolonged period, such as one year, is a common cause of iron deficiency anemia. In iron deficiency anemia, the red blood cells are microcytic (smaller than normal) and hypochromic due to insufficient iron availability. Since only MCV value in the options provided showing microcytic (<80 fL), 85 fL is 5fl . it should be a good choice, although in reality it most likely won't be decreased this much.

4. A 25 years old male who is asymptomatic brings his blood report showing Hb 9g/dl and Microcytic, Hypochromic RBC's. He is taking ferrous sulphate tablets for the last 3 months. What is the possible diagnosis?

A. Aplastic Anemia

B. Beta Thalassemia Trait

C. Hemolytic Anemia

D. Iron deficiency Anemia

E. Pernicious Anemia

b. Beta Thalassemia Trait. The patient has microcytic, hypochromic anemia (Hb 9 g/dL) and has been taking ferrous sulfate for 3 months without improvement. This suggests the anemia is not caused by iron deficiency.
Beta Thalassemia Trait is a common cause of microcytic, hypochromic anemia that does not respond to iron supplementation because it is caused by a genetic defect in hemoglobin production, not an iron deficiency.

5. A 35 years old patient of tuberculosis brings his blood report showing Hb= 8g/dl. His MCV Value would be which one of his following?

A. 90 fl

B. 100 fl

C. 110 fl

D. 120 fl

E. 130 fl

A. 90 fl. The patient has tuberculosis (TB) and anemia (Hb = 8 g/dL). In TB and other chronic infections, the anemia is typically normocytic and normochromic, which means the MCV (Mean Corpuscular Volume) will fall within the normal range (80–100 fL).

6. A 60 years old male presents with Pallor, Shortness of breath, Sore mouth and numbness of feet. He has undergone surgery of his stomach a few months back. Which one is the most appropriate advise for him?

A. Ferrous Sulphate

B. Iron Rich Diet

C. Omeprazole

D. Ranitidine

E. Vit.B12

e. Vit.B12. The patient presents with symptoms of Vitamin B12 deficiency, including:

- Pallor and shortness of breath (anemia-related).
- Sore mouth (glossitis).
- Numbness of feet (peripheral neuropathy).

Additionally, a history of stomach surgery suggests potential disruption of intrinsic factor production, which is essential for Vitamin B12 absorption. This is common after procedures like gastrectomy, which can lead to pernicious anemia or malabsorption of Vitamin B12.

7. A 25 years old healthy lady married 3 months back is planning for pregnancy. Which one of the following you will prescribe before pregnancy?

A. Clomiphene Citrate

B. Ferrous Sulphate

C. Folic Acid

D. Healthy Diet

E. Vit.B12

c. Advise women to take supplements from planning pregnancy to 12wk gestation to prevent neural tube defect. Dose: to prevent first occurrence—400mcg od; if FH of neural tube defect, or mother has BMI >30kg/m2, DM, sickle cell anaemia or coeliac disease, or if taking anticonvulsants, or to prevent recurrence—5mg od. OHGP 5th Ed Page 639

8. A 28 years old male patient of epilepsy has Hb-7.9%. He is taking valproic acid. Which anemia he is more likely to have?

A. Anemia of Chronic Disease

B. Folic Acid Deficiency Anemia

C. Iron deficiency Anemia

D. Hemolytic Anemia

E. Pernicious Anemia

b. Causes of Folate deficiency:

- **Inadequate dietary intake** Common—e.g. old age, poor social conditions, malignancy, anorexia, excess alcohol (particularly spirits)
- **Malabsorption** Coeliac disease, Crohn's disease, partial gastrectomy, tropical sprue, lymphoma, diabetic enteropathy
- **Excess use** Pregnancy, lactation, prematurity, ↑ cell turnover (e.g. malignancy, haemolysis)
- **Drugs** Anticonvulsants, trimethoprim. OHGP 5th Ed Page 639

9. A 25 years old lady is having pregnancy of 12 weeks. Her first child died at the age of 2 years. He had been receiving blood transfusions. What is your advice for her?

A. CBC Examination

B. Continue Pregnancy

C. Ferrous Sulphate

D. Refer for Genetic Advice

E. Terminate Pregnancy

d. The history of the first child requiring repeated blood transfusions suggests a possible genetic disorder such as beta-thalassemia major, sickle cell anemia, or another inherited condition.

During the 12th week of pregnancy, it is crucial to assess the risk of genetic conditions in the current pregnancy.

Genetic counseling can guide the family on:

1. Risk of recurrence in the fetus.
2. Prenatal testing options (e.g., chorionic villus sampling (CVS), amniocentesis) to determine if the fetus is affected.

10. A 35 years old male presents with fever with rigors. His blood report showing Hb= 7g/dL, Bilirubin 6mg/dl, Reticulocytes=4%. What is the possible cause of his anemia?

A. Hepatitis

B. Liver Abscess

C. Malaria

D. Typhoid

E. UTI

c. Malaria. The patient presents with fever with rigors, which is a classic symptom of malaria. His blood report indicates:

- Hb = 7 g/dL: Severe anemia.
- Bilirubin = 6 mg/dL: Elevated due to hemolysis of red blood cells, which releases bilirubin.
- Reticulocytes = 4%: Increased reticulocyte count indicates compensatory bone marrow response to hemolysis.

Malaria, especially caused by Plasmodium falciparum, leads to intravascular hemolysis, resulting in anemia and hyperbilirubinemia.

11. A 30 years old female complains of passing black stool. She is taking ferrous Sulphate tablets for her anemia. What is the appropriate step?

A. Endoscopy

B. Famotidine

C. Omeprazole

D. Reassure

E. Tranexamic Acid

d. Reassure. Black stools in a patient taking ferrous sulfate are a common side effect of iron supplementation. The black color is due to the oxidation of unabsorbed iron and is not a cause for concern.

Reassurance is appropriate as this is a benign and expected effect of the treatment.

12. A mother brings her one year old child suffering from Beta thalassemia. She wants to know the prognosis of his disease. With repeated transfusions and chelation, the child may live maximum up to which of the following age?

A. 1 year

B. 5 years

C. 10 years

D. 15 years

E. 20 years.

e. 20 years. In beta thalassemia major, the life expectancy depends significantly on the frequency of blood transfusions and the efficiency of iron chelation therapy to manage iron overload, which can cause damage to vital organs like the heart and liver.

Without proper treatment, life expectancy is limited, but with regular transfusions and effective chelation therapy, children can live into their 20s or beyond.

13. A mother brings report of her one year old child showing Hb- 6g/dl, MCV- 70 fl. You want to rule out Thalassemia. Thalassemia is diagnosed on the basis of?

A. Blast Cells

B. Hb-Electrophoresis

C. MCV Value

D. RBC Chromatology

E. Reticulocytosis

b. Hb-Electrophoresis. Thalassemia is a genetic disorder caused by abnormal hemoglobin production. The most definitive test to diagnose thalassemia is hemoglobin electrophoresis, which identifies abnormal hemoglobin variants such as HbF, HbA2, or other abnormal patterns seen in beta or alpha thalassemia.
Hb-electrophoresis distinguishes thalassemia from other causes of microcytic anemia like iron deficiency.

14. A mother brings her 3 years old child with the complaints of Lymph nodes enlargement, fever and bruises. His blood report shows WBC 200000/L, platelets 40,000.

What is the most likely diagnosis?
A. Infection

B. Leukemia

C. Lymphoma

D. Myeloma

E. Myelodysplastic Syndrome

b. The clinical presentation and blood report strongly suggest leukemia, particularly acute lymphoblastic leukemia (ALL), which is the most common childhood cancer.
Key findings:

- Lymph node enlargement: Common in leukemia due to infiltration of malignant lymphoblasts.
- Fever: Often due to infection from immune suppression or systemic inflammation caused by leukemia.
- Bruises: Indicative of thrombocytopenia (low platelets, 40,000), leading to bleeding tendencies.
- WBC count of 200,000/L: Markedly elevated, consistent with leukemia, where immature white blood cells (blasts) flood the blood.

15. A mother brings her 6 years old child who is on treatment of acute lymphoblastic leukemia and has enlarged lymph nodes and WBC 100000. The mother is suffering from chicken pox.

What will you advise for the child?
A. Acyclovir

B. Amantadine

C. Antibiotic Prophylaxis

D. Reassure

E. Varicella Ig

e. The child has acute lymphoblastic leukemia (ALL) and is immunocompromised due to the disease and its treatment.
Exposure to chickenpox (varicella), a highly contagious viral infection, poses a serious risk to immunocompromised individuals, as it can lead to severe or disseminated varicella infection.
Varicella Zoster Immune Globulin (VZIG) is indicated in this scenario as post-exposure prophylaxis to reduce the risk of severe varicella.

16. A 25 years old male presents with fever and painless, enlarged cervical lymph nodes. He has enlarged spleen. Which investigation most likely helpful to diagnose this case?

A. Bone Marrow Biopsy

B. Chest X Ray

C. CT Abdomen

D. Lymph Node Biopsy

E. MRI Neck

d. The presentation of painless cervical lymphadenopathy, fever, and splenomegaly suggests a likely diagnosis of lymphoma, particularly Hodgkin lymphoma (HL) or non-Hodgkin lymphoma (NHL).

Lymph node biopsy is the gold standard diagnostic test for lymphoma. It provides histopathological and immunophenotypic evaluation to confirm the diagnosis and differentiate between types of lymphoma.

17. A 40 years female presents with distortion of skin of her right breast. There is no definite lump palpable but asymmetrical nodularity is present. What would you advise?

A. Ciprofloxacin

B. Chymotrypsin

C. Diclofenac

D. Reassure

E. Refer

e. Distortion of skin and asymmetrical nodularity in the breast are concerning signs that may indicate an underlying malignancy such as inflammatory breast cancer or lobular carcinoma, even in the absence of a palpable lump.

Prompt referral to a breast specialist or surgeon is essential for further evaluation, which may include:

1. Imaging: Mammography and/or ultrasound.
2. Biopsy: To confirm or rule out malignancy.

18. A 32 years old female complaining of nodularity of her breast before menstruation. She has a fear of having breast cancer. What would you do in this case?

A. Alprazolam

B. Estrogen

C. Fluoxetine

D. Reassure

E. Urgent Refer

d. Reassure

Breast nodularity before menstruation is a common and benign condition related to fibrocystic breast changes. It is influenced by hormonal fluctuations during the menstrual cycle and typically resolves after menstruation.

Reassurance is the appropriate response, as there is no indication of malignancy based on the provided information. Educating the patient about normal breast changes can help alleviate her fear.

19. A 30 years old female presents with asymmetrical nodularity in her breast. Her mother died of breast cancer. What would be most appropriate advice for her?

A. Diclofenac

B. Estrogen

C. Parlodel

D. Reassure

E. Refer

e. Asymmetrical nodularity
- ≥50y—consider discussion with a specialist/referral
- <50y—review in 6wk. If the nodularity has gone, reassure; otherwise refer. If FH, have a low threshold for discussion with a specialist and/or referral

20. A 25 years old lady complains of pain in her breast before and during menstruation. She is taking COC pill. It is not relieved with ibuprofen. What would you do in this case?

A. Diclofenac

B. Discontinue Pill

C. Reassure

D. Urgent Refer

E. Tramadol

b. Management of mild/moderate cyclical pain
85% patients. Reassure that breast pain is a very unusual symptom of breast cancer. Explain the hormonal basis of symptoms. Consider:
- Diet Reducing saturated fats and caffeine may help
- Support Advise to wear a soft support bra at night
- OTC medication Try simple analgesia (e.g. paracetamol) and/or NSAID. Some women also find oil of evening primrose (gamolenic acid) effective, but it may take 4mo to work
- Changing/stopping hormonal contraceptives or HRT. OHGP 5th Ed Page 667

21. A 25 years old female presents with severe and diffuse breast pain. She has used diclofenac but of no use. What will you do next for her pain?

A. Danazol

B. Ibuprofen

C. Paracetamol

D. Reassure

E. Urgent Refer

a. Management of severe cyclical pain - Defined as pain for >7d/mo for >6mo which interferes with lifestyle. Affects 15% patients. Try measures for management of mild/moderate cyclical pain first. If they fail, consider referral for specialist assessment.
Specialist treatments include: danazol, bromocriptine, tamoxifen, and LHRH analogues. Drug treatment helps ~80% of women. Treatment should be reviewed after 3–6mo and only continued if necessary. After stopping treatment, symptoms recur in about half, but are often less severe. OHGP 5th Ed Page 667

22. A 40 years old female complains of blood-stained discharge from her nipple. What will you advise?

A. Bromocriptine

B. Ciprofloxacin

C. Danazol

D. Reassure

E. Refer

e. Blood-stained nipple discharge is a concerning symptom that warrants urgent evaluation to rule out underlying breast pathology, including intraductal papilloma, duct ectasia, or breast cancer. Referral to a breast specialist or surgeon is necessary for:

- Clinical examination of the breast.
- Imaging: Mammography and/or ultrasound.
- Ductography or ductal lavage: To evaluate the source of the discharge.
- Biopsy: If imaging findings are suspicious.

23. A 25 years old female complains of breast pain. There is diffuse thickening in both breasts which is enlarged prior to menstruation. What is the most likely diagnosis?

A. Ca Breast

B. Fibroadenoma

C. Fibroadenosis

D. Cyclical Change

E. Galactocele

c. Fibroadenosis (also called fibrocystic breast changes) is a common, benign condition in young women characterized by:

- Diffuse thickening in the breasts.
- Breast pain or tenderness (mastalgia) that fluctuates with the menstrual cycle.
- Symptoms that are cyclical, worsening prior to menstruation.

This condition is caused by hormonal fluctuations (primarily estrogen) and is not associated with malignancy.

While fibroadenosis is a type of cyclical change, the term "fibro adenosis" better describes the combination of symptoms (pain, thickening, cyclical nature).

24. A 29 years old lady presents with a 2.0 x 2.0cm size lump in her right breast. It is firm and round. She has history of similar lumps in the past which resolved without surgery. What will you do?

A. Aspirate

B. Danazol

C. Diclofenac

D. Drainage

E. Mastectomy

d. First breast cyst:

- Refer for exclusion of malignancy—urgently if ≥30y. Diagnosis is confirmed with aspiration and/or USS and/or mammography.

Past history of breast cysts:

- 30% of patients who have had a breast cyst develop another at a later date. If the lump is accessible, it is reasonable to attempt aspiration. There is no need to send aspirated fluid for cytology if the fluid is not bloodstained and lump completely resolves. Refer if the

FREE SOURCE

fluid aspirated is bloodstained; the lump does not disappear completely; the cyst refills; aspiration fails; or cytology reveals malignant or suspicious cells. OHGP 5th Ed Page 668

25. A 22 years old lady who is having pregnancy of 7 months presents with a lump of 3.0cm 3.0 cm size in her left breast for the last 3 months. What will you advise?

A. Bromocriptine

B. Chymotrypsin

C. Danazol

D. Reassure

E. Refer

e. Most Likely Galactocele - Milk-containing cyst which arises during pregnancy. Refer any new lump arising in pregnancy to a breast surgeon. Repeated aspiration may be needed. Resolves spontaneously. OHGP 5th Ed Page 669

26. A 50 years old lady has a lump of 4.0cm 5.0cm size in her right breast. The lump is painless, hard and extremely mobile. What is the possible diagnosis?

A. Abscess

B. Carcinoma

C. Cyst

D. Fibroadenoma

E. Galactocele

d. Fibroadenoma - An aberration of normal lobular development. Peak age 16–24y. 3 types: common, giant (>5cm diameter), and juvenile (adolescent girls). Present with a discrete, firm, non-tender, and highly mobile lump (‘breast mouse’). Account for 13% of breast lumps. OHGP 5th Ed Page 668

27. A 30 years old lady presents with pain in her right breast. There is a hot, tender swelling of 5x6 cm in her breast.

What is the treatment of choice?
A. Aspiration

B. Bramocriptine

C. Drainage

D. Fluoclaxacillin

E. Excision

c. Breast abscess - Usually occurs in a lactating breast following mastitis; occasionally in a non-lactating breast in association with indrawn nipple, mammary duct ectasia, or local skin infection. Presents with gradual onset of pain in 1 breast segment with hot, tender swelling of the affected area. Refer for surgical assessment. May be treated with repeated aspiration under ultrasound guidance or surgical incision and drainage.

28. A 25 years old male complains of enlargement of his right breast. His right testis is also enlarged and hard. What would you advise?

A. Bromocriptine

B. Estrogen

C. Mastectomy

D. Refer

E. Testosterone

d. A 25-year-old male with enlargement of the right breast (gynecomastia) and an enlarged, hard testis raises suspicion for testicular cancer, particularly germ cell tumors like seminoma or non-seminoma.
Testicular tumors can secrete hormones such as hCG, which may cause gynecomastia by stimulating estrogen production.
Immediate referral to a specialist (e.g., urologist or oncologist) is essential for:

1. Scrotal ultrasound: To evaluate the testicular mass.
2. Serum tumor markers: Such as AFP, hCG, and LDH.
3. Further imaging: For staging (e.g., CT scan).

29. A 40 years old female requests to include her name in the national screening programme of breast cancer.

Breast screening is recommended in women of age above which the following?
A. 20 years

B. 30 years

C. 40 years

D. 50 years

E. 70 years

d. Most national breast cancer screening programs, including those in countries like the UK (NHS) and the US (USPSTF guidelines), recommend starting mammography screening at 50 years for average-risk women.
Screening is typically offered every 2–3 years for women aged 50–70 years.
Women at higher risk (e.g., family history of breast cancer or BRCA mutations) may begin screening earlier, based on individual assessment.

- Screening Test: Mammography.
- Frequency: Every 2–3 years (or annually in high-risk cases).

30. A 55 years old lady comes for breast cancer screening. Breast screening is done in which of the following time period?

A. 1 yearly

B. 2 yearly

C. 3 yearly

D. 4 yearly

E. 5 yearly

c. In many national breast cancer screening programs, such as the UK's NHS Breast Screening Program, mammography is recommended every 3 years for women aged 50–70 years.
This interval balances the benefits of early detection with the risks and costs associated with more frequent screening.

31. A 55 years old female comes with a painful lump in her right breast. Which of the following is least common in breast cancer?

A. Family History

B. Nipple Discharge

C. Nipple Skin Change

D. Pain Alone

E. Painful Lump

d. Pain Alone <1%. Breast lump (90%), 21% present with painful lump, Nipple skin change (10%), Family history (6%), Nipple discharge (3%), Skin contour change (5%). OHGP 5th Ed Page 674

32. A 30 years old lady comes for reassurance about her risk for breast cancer. Her mother died at the age of 38 years due to breast cancer. Her sister and first cousin have breast cancers at the ages of 35 and 36 years respectively. What will be your first advice in this case?

A. Biopsy

B. CT Scan

C. Genetic Screening

D. Mammography

E. Reassurance

c. Since the patient has multiple first-degree relatives (mother and sister) diagnosed with breast cancer under 40, she meets the criteria for a high familial risk. The appropriate first advice is to refer for genetic screening to assess for mutations such as *BRCA1/2* or *TP53*, as indicated by the significant family history of early-onset breast cancer.

33. A 55 years old female presents with a red, scaly lesion around the nipple. What is the appropriate management?

A. Betamethasone Cream

B. Fucidin Cream

C. Oral Flucloxacillin

D. Oral Prednisolone

E. Refer To Surgeon

e. A red, scaly lesion around the nipple in a 55-year-old female raises suspicion for Paget's disease of the breast, which is a rare form of breast cancer involving the skin of the nipple and areola.

Referral to a breast surgeon is critical for:

- Clinical evaluation.
- Biopsy: To confirm the diagnosis.
- Imaging: Mammography and/or breast ultrasound to detect underlying malignancy, as Paget's disease is often associated with ductal carcinoma in situ (DCIS) or invasive breast cancer.

34. A 55 years old female presents with swelling of her left arm following breast cancer surgery. Which of the following is not advised for her affected limb?

A. Blood Sampling

B. Compression Bandage

C. Elevation

D. Massage

E RESOURCE

E. Moisturizers

a. Management of lymphoedema:In at-risk patients (e.g. patients who have had breast cancer with axillary clearance) or those with lymphoedema, injury to the limb may precipitate or worsen lymphoedema. Do not take blood from the limb or use it for IV access or vaccination. OHGP 5th Ed Page 1025

35. A female patient is advised tamoxifen for he breast cancer. For how long tamoxifen continued?

A.1 year

B. 2 years

C. 3 years

D. 4 years

E. 5 years

E. Tamoxifen ↑ survival of patients with oestrogen receptor +ve tumours (60% tumours) of any age but rarely causes endometrial cancer—warn patients to report any untoward vaginal bleeding. Continue tamoxifen for ≥5y—take advice from a specialist prior to stopping. OHGP 5th Ed Page 675

MENTAL HEALTH

1. 18 years old boy brought by parents with complaints that for last 6 months. He sees a fairy and wants to marry her. Now he says that his neighbour is interested in that fairy. What will be the most appropriate diagnosis?

A. Malingering

B. Delirium

C. Dementia

D. Mania

E. Psychosis

e. Delusional psychosis - Schizophrenia/paranoid psychosis. OHGP 5th Ed Page 984

2. 45 years old man brought by relatives with complains that for last 4 months. He says he is messenger of God. He sleeps less and eats large amount of food. He tries to speech in front of people as preacher. He resists for medical check up. What will be the most appropriate initial step in management before referral?

A. Resperidol

B. Chlorpromazine

C. Diazepam

D. Lithium

E. Sodium valproate

d. Mania is characterized by a persistently high or euphoric mood (≥4d) out of keeping with circumstances. Other signs include: ↑ pressure of speech, ↑ energy and activity, ↑ appetite, ↑ sexual desire, ↑ pain threshold, ↓ desire/need for sleep, ↓ insight, Grandiose delusions, Hallucinations, Labile mood, Over-assertiveness, Spending sprees, Disinhibition, Self-important ideas, Poor concentration. Lithium is Drug of choice—initiate only under specialist supervision. OHGP 5th Ed Page 987

3. A known male patient of psychosis comes to see you for regular check up. He is taking Lithium for 4 weeks. His condition is stable on same dose. When will you recheck his lithium level?

A. After 1week

B. After 2 week

C. After 3 week

D. After 4 week

E. After 3 Months

e. Check levels weekly until the dose is constant for 4wk, then monthly for 6mo; thereafter (as long as the dose is constant), check levels every 3mo. Check plasma creatinine, eGFR, and TFTs every 6mo. OHGP 5th Ed Page 987

4. 33 years old male patient brought by his relative who tells that he has attempted suicide. Patient says that when he thinks about his girl friend every one listen to his thoughts even whole town is listening on the radio. What will be most appropriate drug for this patient?

A. Clomipramine

B. Haloperidol

FREE SOURCE

C. Lithium

D. Lofepramine

E. Risperidone + Sertaline

e. Approximately 10% to 25% of patients hospitalized for depression suffer from psychotic depression. In such cases, patients may experience “mood congruent” symptoms, where they have auditory hallucinations reinforcing their low self-esteem and feelings of worthlessness. Drug of choice is Resperidone, although ECT may be the only effective therapy for severe depression in elderly patients, especially in patients with psychotic depression. Swanson Family medicine Review.

5. A 72 years old man complains of waking up an hour earlier than usual and often cries when he thinks of his late wife who died 8 months back. He also tells that he has *joined* golf club grandchildren. and *enjoys* visiting his What will be your best recommendation for him?

A. Amitryptaline for 3 months

B. Bromazepam for 3 months

C. Fluoxetine for 3 months

D. Reassurance and follow up

E. Refer to Psychiatrist

d. Grief represents an oscillation between loss- and restoration-focused behaviour, demonstrated by swings in mood, thoughts, and behaviour between memories of the dead person and ‘getting on with life’. Avoidance or denial of the loss is common and a part of the process.

6. A 78 years old man, severely depressed, *has not* responded to any antidepressant medicines. He is also having suicidal ideas off and on. What will be your next management plan?

A. Benzodiazepines

B. Olanzapine

C. Electroconvulsive therapy

D. Lithium

E. Psychotherapy

c. Elderly patients with depressive illness may be significantly improved with cognitive or behavioral psychotherapy. Attempts at increased socialization (especially in chronic care facilities), including music therapy, pet therapy, and other therapies that serve to redirect the attention of the elderly patient, appear to be effective in the treatment of depression in the elderly. ECT may be the only effective therapy for severe depression in elderly patients, especially in patients with psychotic depression. ECT is well tolerated in geriatric patients. Indications include severe depression when a rapid response is necessary and when depression is resistant to drug therapy; ECT is also indicated for patients unable to tolerate antidepressants or who have psychotic depression, severe catatonia, or depression with Parkinson disease. ontraindications to ECT include an intracranial mass, recent myocardial infarction, or recent cardiovascular accident. Swanson Family medicine Review.

7. 52 years old teacher presents with lethargy and weakness during her daily routine activities. Her appetite has decreased and now she feels irritable during the daytime. *She visits her friends routinely* and teaching her students.

What is her most probable diagnosis?

A. Somatizatron

B. Major depression

C. Masked depression

D. Mild depression

E. Psychotic depression

d. Mild depression ≥5 symptoms of depression that result in only mild functional impairment. OHGP 5th Ed Page 980

8. 28 years old woman presents with frequent attacks of low mood every month for last few months, which lasts for 5-6 days during this period she *cannot concentrate* on her job and has become quite *irritable*. What is the *best treatment option* for her?

A. Anxiolytic medication

B. Monoamine Oxidase Inhibitors

C. Reassurance and counseling

D. Selective Serotonin Reuptake Inhibitors

E. Tricyclic Antidepressants

d. PMS - Affective symptoms: depression, angry outbursts, irritability, anxiety, confusion, and withdrawal. Pharmacologic treatments for PMS and PMDD include Selective Serotonin Reuptake Inhibitors (SSRIs) and Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs), which have strong evidence (level 1a) supporting their effectiveness. Estrogen therapy and combined oral contraceptives (COCs) show mixed outcomes and may sometimes exacerbate symptoms, though drospirenone-containing oral contraceptives can be effective in reducing several symptoms. Androgen therapy (e.g., danazol) and GnRH agonists (e.g., Lupron) are other options but are limited by their side effects. For physical symptoms, Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) are effective, except for breast tenderness. Lastly, diuretics like spironolactone can help alleviate breast tenderness and bloating. Swanson Family medicine Review

9. 17 years old girl presents with recurrent attacks of low mood and lack of interest in daily activities. She is putting on weight and likes to sleep the whole day. She has craving for bread and cereals especially in winters. What is the best choice of drug for her?

A. Amitryptaline

B. Clonazepam

C. Phenelzine

D. Sertraline

E. Venlafaxine

d. Seasonal affective disorder (SAD) - 'Winter blues'—recurrent disorder involving 'seasonal' episodes of depression, usually in the winter months. Peak incidence third decade. Symptoms: Depression + ↑ sleep, ↑ food intake (with carbohydrate craving), and weight ↑. 30% experience elatory mood swings in summer. Management: SSRIs (particularly sertraline); phototherapy (30–90min/d in the early morning—effects should be seen within 3wk). OHGP 5th Ed Page 994

10. A 70 years old man, comes to you with moderate symptoms of depression. He is also suffering from prostatism and glaucoma. Which drug is contraindicated in him?

A. Amitriptyline

B. Clonazepam

C. Phenelzine

D. Sertraline

E. Venlafaxine

a. Tricyclic antidepressants (TCAs) - e.g. lofepramine 70mg od/bd/tds, imipramine 10–300mg/d. Titrate dose until the patient feels the drug is helping or until side effects intrude. Common side effects: drowsiness, dry mouth, blurred vision, constipation, urinary retention, sweating. Use with caution if history of CVD (risk of arrhythmia), prostatic hypertrophy (↑ risk retention), and ↑ intraocular pressure (↑ risk acute glaucoma). OHGP 5th Ed Page 982

11. 28 years old businessman comes with severe *headache*, palpitation, and flushing. His B.P. is *180/110.* Last night he attended a party where he used wine. He is already on some medication. Which drug he is most likely using?

A. Amitryptiline

B. Bromazepam

C. Fluoxetine

D. Phenelzine

E. Risperidone

d. Monoamine oxidase inhibitors (MAOIs) - e.g. phenelzine 15mg tds. Should only be initiated in a specialist setting. Do not start until:

- >1–2wk after a tricyclic is stopped (3wk if clomipramine/imipramine)
- >1wk after an SSRI is stopped (2wk if sertraline; 5wk if fluoxetine)

Patients must be careful with diet, eating only fresh foods, and avoiding game, alcohol, and foods containing tyramine, e.g. mature cheese, pickled herring, broad bean pods, and meat, yeast, or soya bean extracts. Failure to do so results in rapid ↑ in BP (often preceded by a headache). OHGP 5th Ed Page 983

12. 40 years old male presents with *dry mouth*, polyuria *and polydypsia*. He is using some medicine from quite some time prescribed by psychiatrist.

Which drug is responsible for his symptoms?

A. Lithium

B. Escitalopram

C. Mirtazapine

D. Olanzapine

E. Valproic acid

a. Hypothyroidism is a potential side effect of lithium carbonate treatment, even at therapeutic levels. Patients presenting with symptoms such as increased fatigue and weight gain should have their TSH, T3, and T4 levels measured. Other side effects at therapeutic lithium levels can include weight gain, polyuria, and exacerbation of psoriasis. In contrast, symptoms like tremor, diarrhea, vomiting, ataxia, and restlessness are more indicative of lithium toxicity. Swanson Family medicine Review pg 711

13. 40 years old housewife presents with headache, decreased appetite and disturbed sleep. She is also having severe burning pain in hands.

What is the most suitable drug for her?

A. Amitriptyline

B. Buspirone

C. Escitalopram

D. Fluoxetine

E. Phenelzine

a. Tricyclic antidepressants (TCAs) are associated with significant anticholinergic side effects, including dry mouth, urinary retention, constipation, and blurred vision, which limit their frequent use. More serious adverse effects include orthostatic hypotension and cardiac arrhythmias, which can lead to second-degree or third-degree heart block. Additionally, TCAs tend to be more sedating compared to selective serotonin reuptake inhibitors (SSRIs) and mixed reuptake inhibitors, making them less favorable for some patients. Here sedation is favorble for sleep.

14. 16 years old boy is brought by his parents complaining that his behavior is quite rude a home and misbehaves with teachers a school. Whenever there is gathering or guests at home, he tries to avoid them. What could be the most appropriate management for him?

A. Low dose atypical antidepressants

B. Mood stabilizers

C. Reassure there is no organic disease

D. Refer him to psychiatrist

E. Selective serotonin reuptake inhibitors

c. Conduct disorders - Poor behaviour (e.g. aggression, destructive tendencies, and antisocial behaviour) are common complaints. Tolerance varies from family to family. Try simple strategies such as rewarding good behaviour and ignoring poor behaviour ± 'time-out' strategies (younger children. OHGP 5th Ed Page 889

15. 20 years male presents with itching, abdominal pain, attacks of *diarrhea* off and on and weakness of right arm in front of others for last one month. His physical checkup is normal and lab reports are remarkable. What is the most probable diagnosis?

A. Dependent disorder

B. Histrionic disorder

C. Malingering

D. Munchausen's Syndrome

E. Schizoid disorder

d. Factitious disorder (Munchausen syndrome) - Intentional feigning of physical/psychological symptoms to assume the sick role (± hospital admission). Can be difficult to detect. Differs from malingering as there is no external reward (e.g. financial). Common presentations: Physical Dermatitis artefacta, PUO, bruising disorders, brittle DM, diarrhoea of unknown cause; neurological symptoms, e.g. pseudoparalysis or pseudofits (neurologica diabolica); abdominal pain (laparotomophilia migrans); chest pain (cardiopathia fantastica). OHGP 5th Ed Page 994

16. 40 years old patient comes with breathlessness on exertion and chest pain. He is *mason by profession* and *do not have any* symptoms while working. He has been sent by an insurance company to evaluate his illness. What is the most probable diagnosis?

A. Factitious disorder

B. Munchausen's Syndrome

C. Partial Malingering

D. Pure Malingering

E. Simulation

d. Intentional production or feigning of physical or psychological symptoms to assume the sick role for a known external purpose. Malingering is not considered a mental illness or psychopathology, although it can occur in the context of other mental illnesses.

- Pure malingering: The individual falsifies all symptoms.
- Partial malingering: The individual has symptoms but exaggerates the impact they have upon daily functioning
- Simulation: The individual acts out symptoms of a specific disability
- False attribution: The individual has valid symptoms but is dishonest as to the source of the problems, e.g. attributing neck pain to RTA to obtain compensation

17. 6 years old child is brought by his mother repeatedly for abdominal pain and headache. You found bruises on his body at different stages. What will be your next step in his management?

A. Advise him some medication

B. Involve all relevant agencies

C. Reassure his mother

D. Send for further lab investigations

E. Send him to psychiatrist

b. Munchausen syndrome by proxy - Caregiver—typically a mother with child—seeks repeated medical investigations and needless treatment for the person he/she is caring for. The child or person being cared for may actually be harmed by the carer to achieve these aims. Commonly reported symptoms include: neurological symptoms, bleeding, rashes. Often difficult to detect and even harder to prove. A form of abuse that must be taken seriously and handled with care Involve all relevant agencies early (e.g. social services, pediatrics). OHGP 5th Ed Page 995

18. A 50 years alcoholic old man presents with difficulty in chewing and nasal twang of voice for 1 week. His son complains of loss of memory of his father. What is the most probable diagnosis?

A. Alcoholic dementia

B. Alzheimer's disease

C. Lewy body dementia

D. Pick's dementia

E. Vascular dementia

e. Vascular (multi-infarct) dementia - Multiple lacunar infarcts or larger strokes cause generalized intellectual impairment. Tends to occur in a stepwise progression with each subsequent infarct. The final picture is one of dementia, pseudobulbar palsy, and shuffling gait with small steps. Treatment is as for secondary prevention of TIA/stroke. OHGP 5th Ed Page 991

19. A 60 years old patient presents with gradual loss in memory and inability to perform simple task. His clothes are dirty. He is taking thyroxin 150 mcg daily. What is the most probable DIAGNOSIS?

A. Alzheimer's disease

B. Lewy body dementia

C. Pick's dementia

D. Thyroxine overdose

E. Vascular dementia

a. Alzheimer’s dementia - Most common form of dementia. Cause: unknown—defective genes found on chromosomes 14, 19, and 21. Risk factors: FH, Down’s syndrome (onset at ~30y), late-onset depression, hypothyroidism, history of head injury. Presents with steady ↓ in memory and cognition. OHGP 5th Ed Page 991

20. 65 years old patient presents with loss of short term memory. His son told that he was caught stealing things in a departmental store. What is the most probable diagnosis?

A. Alzheimer's disease

B. Lewy body dementia

C. Manic disorder

D. Pick's dementia

E. Vascular dementia

d. Pick dementia - Dementia characterized by personality change associated with frontal lobe signs such as gross tactlessness. Lack of restraint may lead to stealing, practical jokes, and unusual sexual adventures. Treatment is supportive. OHGP 5th Ed Page 991

21. 60 years old male brought by his son with complain of loss of memory. His son told that he often talks to his dead wife. Which medicine is safe for him?

A. Amisulpride

B. Diazepam

C. Haloperidol

D. Lithium

E. Risperidone

b. Lewy body dementia - Fluctuating but persistent cognitive impairment, parkinsonism, and hallucinations. No specific treatment. Avoid antipsychotics as they can be fatal. Use benzodiazepines if tranquilization is necessary. OHGP 5th Ed Page 991

22. A 35 years divorced pharmacist presents to discuss her suicidal thoughts. She is living alone. What is the most appropriate step?

A. Home supervision

B. Hospital admission

C. Involve her parents

D. Start Antidepressants

E. Refer to psychiatrist

b. Individuals at high risk of suicide may exhibit signs such as a direct statement of intent, severe mood changes, feelings of hopelessness, alcohol or drug dependence, abnormal personality traits, or living alone. In such cases, if the person declines voluntary admission, they should be admitted as a psychiatric emergency under the Mental Health Act for compulsory admission to ensure their safety. OHGP 5th Ed Page 1101

23. A 17 years old female presents with intense fear of weight gain. She has amenorrhea for 4 months. Her BMI is 16.5 kg/m2. She is taking erythrocin for her sore throat. Which investigation is most important for follow up?

A. A.L.T

B. E.C.G

C. E.S.R

D. S/ Creatinine

E. Ultrasound

b. Many patients with anorexia have compromised cardiac function. Avoid prescribing drugs adversely affecting cardiac function (e.g. antipsychotics, TCAs, macrolide antibiotics, some antihistamines). If prescribing is essential, then do a baseline ECG and follow-up ECG monitoring. OHGP 5th Ed Page 992

24. A 25 years old female presents with episodes of binge eating followed by laxative intake. Her periods are normal & B.M.I is 24 kg/m2 What is the drug of choice?

A. Escitalopram

B. Fluoxetine

C. Lofepramine

D. Sertraline

E. Sibutramine

b. Bulimia nervosa, Management - Give ongoing support and information, Check electrolytes, First-line treatments—evidence-based self-help, e.g. 'Self-help for bulimia and binge eating' ± antidepressant medication (fluoxetine 60mg od), If unsuccessful, refer to a specialist eating disorders clinic (if available) or the mental health team. OHGP 5th Ed Page 992

25. 18 years old female presented with the complaints of sensitivity to the noise, palpitations, dryness of mouth and hand tremors. Her pulse found 100/min and regular, other general and physical examination is normal. You started Tab *diazepam* alone for her condition. For how much duration it should not exceed

A. 1 to 2 weeks

B. 2 to 4 weeks

C. 4 to 6 weeks

D. 6 to 8 weeks

E. 8 to 10 weeks

b. Avoid benzodiazepines except for acute crises; restrict use to <4wk. OHGP 5th Ed Page 971

26. 18 years old female presented with restlessness, irritability, tremors, dizziness and headache. You prescribed Bromazepam thrice a day initially and then added Paroxetine 50 mg once day, she feels much better. For how long *Paroxetine* should be continued?

A. 2 months

B. 3 months

C. 4 months

D. 5 months

E. 6 months

e. Timescale of action—immediate effect but unlikely to notice significant improvement for >2wk, maximum effect at 4–6wk, Likely side effects including possible ↑ in anxiety in the first 2wk, and Likely duration of treatment: ≥6mo from recovery. OHGP 5th Ed Page 982

27. A 16 years old girl complaint of increased heart rate, dry mouth and tremors when her teacher asks her a question. She sits in a last row and tries to hide herself from her teacher behind other girls. What is the most probable diagnosis?

A. Agoraphobia

B. Claustrophobia

C. Panic attack

D. Simple phobia

E. Social phobia

e. Social phobia (social anxiety disorder) - Intense/persistent fear of being scrutinized or negatively evaluated by others leads to fear and avoidance of social situations (e.g. using a telephone, speaking in front of a group). Significantly disabling; not just shyness. May be generalized (person fears most social situations) or specific (related to certain activities only). Ask about safety-seeking behaviour. OHGP 5th Ed Page 973

28. 26 years old complaints of tremors, palpitations and fearful anticipation, whenever he has to go to supermarket for shopping and prefer to stay at home. What is the most probable diagnosis?

A. Agoraphobia

B. Panic disorder

C. Claustrophobia

D. Simple phobia

E. Social phobia

a. Agoraphobia - Peak age of onset is 20–40y with an initial panic attack. Subsequently, panic attacks, fear of fainting, and/or loss of control are experienced in crowds, away from home, or in situations from which escape is difficult. Avoidance results in patients remaining within their homes where they feel safe. Other symptoms include depression, depersonalization, and obsessional thoughts. OHGP 5th Ed Page 973

29. 22 years old female comes and tells you that 3months back she had complaints of chocking, shortness of breath, flushes and fear of dying without any recognizable problem. She is afraid of having another attack and asking you repeatedly, will she have this problem again.

Her lab tests and physical examination is normal What is the most probable diagnosis for her condition?

A. Generalized anxiety disorder

B. Panic Attack

C. Panic Disorder

D. Phobic Disorder

E. Somatization disorder

c. Panic disorder - Chronic disorder; recurrent panic attacks associated with persistent fear of having (or the consequences of) another attack. OHGP 5th Ed Page 972

30. 33 years old male complaints of pain in his lower left side of his ribs, persistently for last many months, his X ray and lab tests are normal. On exploring more he told you that he has two deaf and dumb children and had business loss too. Which of the following condition describes his conditions?

A. Anxiety

B. Dysthymia

C. Hypochondriasis

D. Schizophrenia

E. Somtization disorder

e. Somatic Symptom Disorder is characterized by multiple physical complaints that typically begin before the age of 30. These symptoms tend to be chronic and long-standing, often involving various systems such as pain symptoms, gastrointestinal disturbances, sexual dysfunction, and pseudoneurologic symptoms. These physical issues are usually associated with significant impairment in social or occupational functioning, leading to distress and disruption in daily life. Swanson Family Medicine Review 9th Ed Pg 748.

NEUROLOGY

1. A 40 years old male complains of difficulty in walking for the last 2 weeks. He has road side accident 2 week ago and got injury at back. He is unable to stand on toe tips, invert foot, flex toes and there is numbness of sole of foot. Which nerve is involved?

A. Common peroneal nerve

B. Femoral nerve

C. Deep peroneal nerve

D. Sciatic nerve

E. Tibial nerve

e. Tibial nerve S1-S3 - Inability to stand on tiptoe, invert the foot or flex toes, Sensory loss over sole. Cause is Trauma or entrapment. OHGP 5th Ed Page 513

2. A 28 years old male footballer comes with complain of numbness of root of thumb and unable to open his fist or lift objects after trauma at arm while playing game. Which nerve is involved?

A. Lateral cutaneous nerve of arm.

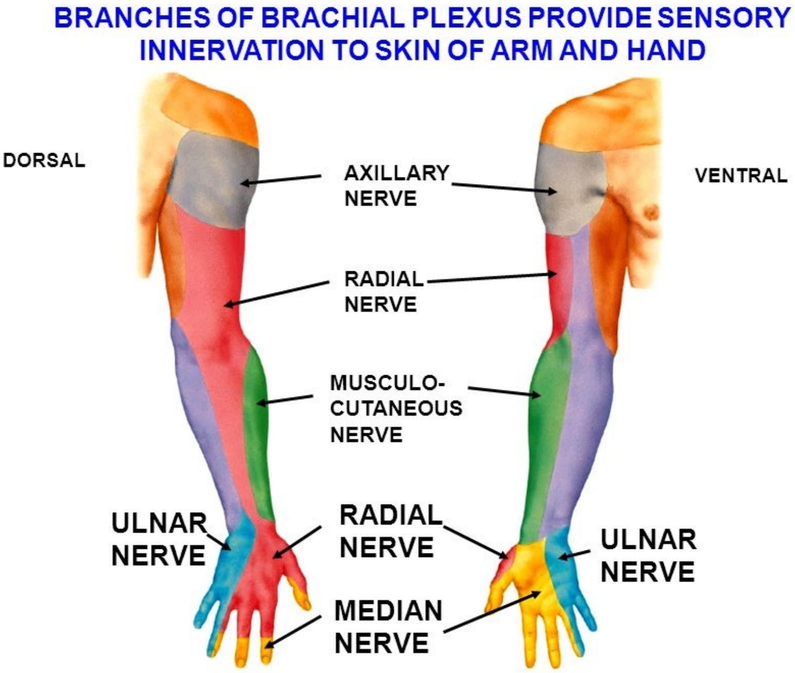
B. Median nerve

C. Radial nerve

D. Ulnar nerve

E. Upper cutaneous nerve of arm

b. Radial nerve C5–T1 - Sensory loss is variable but always includes the dorsal aspect of the root of the thumb. Wrist drop and weak extension of thumb and fingers. OHGP 5th Ed Page 513


BRANCHES OF BRACHIAL PLEXUS PROVIDE SENSORY INNERVATION TO SKIN OF ARM AND HAND
DORSAL
VENTRAL
AXILLARY NERVE
RADIAL NERVE
MUSCULO-CUTANEOUS NERVE
ULNAR NERVE
RADIAL NERVE
MEDIAN NERVE
ULNAR NERVE

3. A 30 years old male comes with fever, vomiting and lethargy for 48 hrs. He has headache and stiffness of neck. His pulse 120/min, BP 90/60mmhg, temp=103 F°. What would be the single most appropriate step in management?

A. Amoxicillin for 24 hours and review

B. Amoxicillin, Metoclopramide, Ibuprofen

C. Refer immediately + Ceftriaxone

D. Refer immediately + ciprofloxacin

E. Send for CT scan brain

c. If symptoms/signs of meningococcal disease - Give IV/IM antibiotics (Ceftriaxone) immediately while awaiting transport. Do not delay hospital transfer to give antibiotics. For meningitis without signs of meningococcal disease, only give antibiotics if urgent hospital transfer is not possible. OHGP 5th Ed Page 1056

4. A 24 years old female comes with fear of having meningitis because her mother died due to meningitis 3 days back. What will you advise her?

A. Ceftriaxone

B. Ethambutol

C. Meningococcal vaccine

D. Reassure

E. Rifampicin

e. Meningitis and acute encephalitis are notifiable diseases. Contact tracing is undertaken by the local public health department. For a single case, only close contacts ('kissing contacts'), e.g. people living in the same household, require prophylactic antibiotics and vaccination. Prophylactic antibiotics:

- Ciprofloxacin 500mg as a single dose (age 5–12y—250mg; <5y—30mg/kg—maximum 125mg), or
- Rifampicin 600mg bd for 2d (child 10mg/kg bd for 2d unless <1y when dose is 5mg/kg bd for 2d). Rifampicin colours urine red. OHGP 5th Ed Page 1058

5. A 34 years old businessman comes with headache for 14 days lasting 30 min. It is pressing, tightening in nature. Not effecting daily activities and nor aggravated by routine physical activities. He works 16 hours/day. He takes brufen for pain 3 times/day. What will you tell him regarding type of headache?

A. Chronic daily headache

B. Cluster headache

C. Migraine headache

D. Simple headache

E. Tension headache

e. Episodic Tension-type headache – Defined as headache lasting 30min–7d and occurring <180d/y (<15d/mo), Acute management:

- Simple analgesia, e.g. paracetamol, ibuprofen. Avoid codeine-containing preparations and other opioids. Advise short-term use of analgesics only. At risk of medication overuse headache and/or opioid dependence if analgesics are used long term

- Try measures to alleviate stress—relaxation; massage; yoga; exercise
- Treat musculoskeletal symptoms with physiotherapy
- Consider referral for prophylaxis with acupuncture (if available)—up to 10 sessions over 5–8wk. OHGP 5th Ed Page 530

6. A 31 years old female *asthmatic* comes with headache and photophobia for 6 weeks. Her headache is thrice a week. Her sleep and appetite are disturbed. What will you prescribe her to prevent headache?

A. Amitriptyline

B. Propranolol

C. Valproate

D. Verapamil

E. Zolmitriptan

a. Amitriptyline - First-line medications established as effective based on clinical evidence include divalproex, topiramate, metoprolol, propranolol, and timolol. Medications such as amitriptyline, venlafaxine, atenolol, and nadolol are probably effective but should be second-line therapy. There is limited evidence for nebivolol, bisoprolol, pindolol, carbamazepine, gabapentin, fluoxetine, nicardipine, verapamil, nimodipine, nifedipine, lisinopril, and candesartan. Acebutolol, oxcarbazepine, lamotrigine, and telmisartan are ineffective. Patient in this scenario is asthmatic, so second line drugs like Amitriptyline aree best for prophlaxis against migraine. https://www.aafp.org/pubs/afp/issues/2019/0101/p17.html

7. A 42 years old housewife comes with headache for 6 months. Her frequency of headache is 18 days per month and moderate in intensity with slight nausea, without vomiting. She takes cares of her family alone. What treatment you will advise her?

A. Amitriptyline

B. Fluoxetine

C. Nelbin

D. Paracetamol

E. Triptans

a. Amitriptyline - Given the frequency and nature of the headaches, prophylaxis with a TCA like amitriptyline is appropriate.

8. 39 years old male comes with worsening headache for last 6 weeks when he stopped treatment. He was taking Triptans paracetamol, ibuprofen and chlorpromazine for last 3 months irregularly. Also, his sleep appetite is disturbed. His daily activities normal. What is the most appropriate next step?

A. Add propranolol

B. Cognitive therapy

C. CT scan of brain

D. Give medicines regularly

E. Taper his medicines

e. Medication overuse headaches result from frequent use of acute headache medications. Medication overuse headaches often have a frequency between seven and 14 days per month and usually start after three months of frequent acute medication use. Using anxiolytics, analgesics, and sleep-inducing medications increases medication overuse headache risk. Celecoxib (Celebrex), prednisone, and specific medication withdrawal strategies have been proposed to wean overused medications. https://www.aafp.org/pubs/afp/issues/2021/0900/p316.html

Explain the condition to the patient. Advise stopping overused medication abruptly for at least 1mo. Provide follow-up and support over 4–8wk; warn that symptoms may worsen initially (day 3–7) before improving. Review treatment of underlying problems (e.g. migraine, chronic musculoskeletal pain). Consider specialist referral if taking strong opioids or recurrent, failed attempts to stop medication overuse. OHGP 5th Ed Page 531

9. A 38 years old medical student comes with headache, pain around left eye, runny nose for 4 weeks. Pain last up to 40 min and occurs once daily. He noticed pain starts $1^{1/2}$ hrs after sleep or when he uses alcohol. What treatment you will advise immediately?

A. Diclofenac

B. Lithium

C. Oxygen

D. Paracetamol

E. Verapamil

c. Cluster headache - Acute attack: 100% oxygen (>12L/min) for 10–20min; 5HT1agonists, e.g. sumatriptan (6mg sc or 20mg intranasal)—stops 75% in <15min. OHGP 5th Ed Page 530

10. A 40 years old male comes with history of repeated attacks of headaches around right eye with drooping of upper eye lid and red watery eye, runny nose for 8 weeks. Pain last for 1hr and occurs 1-2 time/day daily. 2 years ago he had same type of headache at same side. He was normal for 2 years after it. What treatment will you advise him for prophylaxis?

A. Propranolol

B. Pizotifen

C. Valproate

D. Amitriptyline

E. Verapamil

e. Cluster headache – Prophylaxis: Consider verapamil 80mg tds/qds if attacks are frequent (needs ECG monitoring—seek specialist advice if unfamiliar with use). More effective if initiated early at the start of a new cluster. Refer for specialist advice if no response to verapamil. OHGP 5th Ed Page 530

11. A 55 years old hypertensive lady comes with complain of severe burning type of pain at left side of her jaw for 3 weeks. She noticed pain starts when she forcefully chews. Pain lasts for 4 min. What is the most appropriate step in management?

A. Carbamazepine

B. Carbamizole

C. Gabapentine

D. Phenytoin

E. Refer

a. Trigeminal neuralgia - Paroxysms of intense stabbing, burning, or ‘electric shock’-type pain lasting seconds to minutes in the trigeminal (V) nerve distribution; 96% unilateral. Mandibular/maxillary > ophthalmic division. Between attacks there are no symptoms. Spontaneous remission may occur. The drug of choice for treatment of trigeminal neuralgia pain is carbamazepine (unlicensed indication). OHGP 5th Ed Page 531

12. A 23 years old female comes with recurrent attacks of left sided headache, hemianopia, inability to write and difficulty in speaking which last for 8-10 min since last 4 weeks. She is afraid of next attack and abandons everyday activities. Her health is otherwise normal Her CT scan brain is normal. What is the most likely diagnosis?

A. Migraine with aura

B. Migraine without aura

C. Space occupying lesion

D. Stroke

E. Transient Ischemic attack

a. Migraine with aura - Symptoms arise over ≥5min and last 5–60min before resolving completely. Diagnose if:

- Visual symptoms, e.g. flickering lights, spots, lines; partial loss of vision
- Sensory symptoms, e.g. numbness; paresthesia, and/or
- Speech disturbance. OHGP 5th Ed Page 528

13. 21 years old university student comes with complain of headache for 2 months. The pain is pulsating in nature aggravated by climbing stairs and affecting his studies. He has 6 attacks/month lasting usually $5^{1/2}$ hrs.

What will be the diagnosis?

A. Complicated migraine

B. Migraine classical

C. Migraine with aura

D. Migraine without aura

E. Tension headache

D. Migraine without aura - (Recurrent pulsating headache aggravated by activity and lasting hours suggests typical migraine without aura.)

14. A 45 years old female comes with attacks of migraine after initiation of HRT. She takes Paracetamol which is not working. What is the single most appropriate step in the management?

A. Amitriptyline

B. Brufen

C. Reduce HRT

D. Stop HRT

E. Triptan

d. Reasons to stop HRT immediately:

- Serious neurological side effects, e.g. severe headache, first fit
- Sudden, severe chest pain, breathlessness/haemoptysis, or stomach pain

- Unexplained swelling or severe pain in calf of one leg
- Hepatitis, jaundice, or liver enlargement
- BP >160mmHg systolic and/or >95mmHg diastolic
- Prolonged immobility after surgery or leg injury
- Contraindication becomes apparent. OHGP 5th Ed Page 689

15. A 33 years old female comes with severe unilateral headache, repeated vomiting for 7 hrs. Before starting of pain, she saw zig zag lines and has not passed urine for last 6 hrs. Her pulse is 130 per minute and BP is 90/60 mm Hg. She has taken one tablet of Sumatriptan 2 hr ago. What will be next most appropriate step in management?

A. CT scan of brain

B. Ergotamine

C. Serum electrolytes

D. Repeat Sumatriptan

E. Ringer's lactate

e. Ringer's lactate - (The patient has dehydration due to vomiting and insufficient fluid intake; hydration is critical.)

16. A 28 years old female comes as diagnosed case of migraine attack before menstrual cycle. She tried mefenamic acid for 3 cycles, but has poor result. What will be the next most appropriate step?

A. Norethisterone

B. Oral contraceptive pills

C. Trans dermal estrogen

D. Transamine

E. Triptan

e. Menstrual migraine, Suspect if migraine occurs from 2d before to 3d after start of period on at least 2 out of 3 consecutive months (use headache diary). If predictable menstrual-related migraine that does not respond to standard acute treatment, consider frovatriptan (2.5mg bd) or zolmitriptan (2.5 mg bd/tds) on the days that migraine is expected. OHGP 5th Ed Page 529

For menstrual migraines, starting preventive therapy before the time of expected migraine onset can help prevent disability and reduce severity.34 Frovatriptan (Frova), naratriptan (Amerge), and zolmitriptan (Zomig) all demonstrated effectiveness. Frovatriptan has the strongest evidence and is supported by two clinical studies. In one study, frovatriptan groups had a lower incidence of menstrual headaches during a six-day period vs. placebo (52% with frovatriptan, 2.5 mg daily, vs. 41% with frovatriptan, 2.5 mg two times a day, vs. 67% with placebo; P < .0001). Naratriptan and zolmitriptan have been found beneficial in one study.

https://www.aafp.org/pubs/afp/issues/2019/0101/p17.html#afp20190101p017-b34

17. 45 years old labour comes with complain off severe headache and weakness of right hand for last 1 month. His wife complains about his irritability and behaviour. What will be the most appropriate socially inappropriate diagnosis?

A. Complicated migraine

B. Epilepsy

RESOURCE

C. Huntington's chorea

D. Space occupying lesion

E. Stroke

d. Space occupying lesion - Clinical features of ↑ ICP include Drowsiness, ↓ conscious level, Irritability, VI nerve palsy,Papilloedema, Dropping pulse, Rising BP, Focal neurological signs—due to underlying pathology, Pupil changes—constriction then dilatation. OHGP 5th Ed Page 532

18. A 45 years old comes with total loss of movement in rt. Limb for 4 hrs. His BP-160/100 and also has difficulty in speech. What will be the next step for BP management at this stage?

A. Atenolol

B. Frusemide

C. Enalapril

D. Monitor for 1 week

E. Monitor for 2 weeks

d. First thing to do in case of suspected stroke is to perform CT scan to differentiate ischemic vs hemorrhagic stroke. If suspected ischemic stroke, BP is typically not aggressively lowered initially unless it's critically high). NICE recommends monitoring BP for 1 week in acute ischemic stroke and then start Enalapril. However, if haemorrhage suspected, then lower BP to 140/90 within one hour. https://www.nice.org.uk/guidance/ng128/chapter/Recommendations#specialist-care-for-people-with-acute-stroke

19. A 30 yrs old male comes to emergency with head injury during a road traffic accident 1⁄2 hr ago. His pulse is 110/min, BP-90/60mmhg, r/r-22/min. He opens eyes and obeys commands and is confused. What will be the most appropriate step in management?

A. CT scan brain

B. Mannitol

C. MRI scan brain

D. Refer to ER

E. X-ray skull

d. Refer to ER

- Ensure ABCs (Airway, Breathing, Circulation) are intact.
- Administer IV fluids if hypotension is suspected to be secondary to hypovolemia.
- Arrange emergency transfer to a hospital capable of performing a CT scan and providing neurosurgical care if needed.

20. A 3 years old girl comes to emergency with head injury after falling from 5 stairs 6 hrs before. She is sleepy and slightly irritable, but wakes up by shaking or calling her name. Her parents are worried about her sleepiness What is the single most appropriate advice regarding sleepiness of child?

A. CT scan

B. Paracetamol

C. Reassure

D. Refer for surgical opinion

E. Refer to ER

e. Refer to ER

- Ensure ABCs (Airway, Breathing, Circulation) are intact.
- Administer IV fluids if hypotension is suspected to be secondary to hypovolemia.
- Arrange emergency transfer to a hospital capable of performing a CT scan and providing neurosurgical care if needed.

21. A 30 years old housewife presents with complaint of sudden jerky movements of her right arm first time in her life. What is next appropriate step?

A. Refer to ER

B. Refer to neurologist

C. Refer to psychiatrist

D. Start antiepileptic

E. Start anxiolytic

b. Refer all patients with a first suspected seizure for assessment by a neurologist with training and expertise in epilepsy urgently to exclude underlying causes (e.g. tumour) and receive clear guidance on medication, work, and driving. OHGP 5th Ed Page 546

22. On routine school check up teacher complaints about a 6 year that one student suddenly stops talking in mid-off sentence for a sentence for few seconds since the last two months. What is the single most appropriate medicine?

A. Valproic acid

B. Phenobarbitone

C. Phenytoin

D. Carbamazepine

E. lamotrigine

a. Absence seizures ('petit mal epilepsy') - 10–12% of childhood epilepsy. Age of onset 4–10y (peak age 5–7y); ~15% have a FH. The child stops and may stare into middle space for a period of 4–20s. Can occur 50–100×/d. Deterioration in school performance may be the first sign. Separating absence attacks from daydreaming can be difficult. EEG is characteristic.

Management and prognosis: 70% become seizure free with medication. ~15% go on to develop JME. ~10% have seizures in adult life.

(Valproic acid or ethosuximide is used for absence seizures.). OHGP 5th Ed Page 877

23. A known epileptic husband and wife come for an advice regarding conception and want to know the chances of epilepsy in their children. What is the single most appropriate option?

A. 5%

B. 10%

C. 20%

D. 30%

E. 40%

c. 20%

(The chance of epilepsy in children of epileptic parents is approximately 20%.)

24. A 32 years bus driver had two episodes of seizures one month ago. His driving license was revoked due to epilepsy. What is your advice regarding seizure free period to regain license?

A. Seizure free 1 year to regain license

B. Seizure free 2 year to regain license

C. Seizure free 3 year to regain license

D. Seizure free 5 year to regain license

E. Seizure free 10 year to regain license

e. Epilepsy or multiple unprovoked seizures Group 1—stop driving until fit-free for >1y; group 2—licence restored if seizure-free for >10y off antiepileptic medication. OHGP 5th Ed Page 548

25. A 25 years old epileptic comes to discuss his driving restriction. Your suggestion to regain license is

A. Seizure free for 1 year

B. Seizure free for 2 years

C. Seizure free for 3 years

D. Seizure free for 4 years

E. Seizure free for 5 years

a. Epilepsy or multiple unprovoked seizures Group 1—stop driving until fit-free for >1y; group 2—licence restored if seizure-free for >10y off antiepileptic medication. OHGP 5th Ed Page 548

DRIVING SEIZURE

Epilepsy	**1st unprovoked seizure**	Notify DVLA and stop driving for 6 months.	Notify DVLA and stop driving for 5 years.
	Multiple unprovoked seizures	Notify DVLA and stop driving for 12 months.	Notify DVLA and stop driving for 10 years unless seizure-free and off medication.

26. A 30 years well controlled epileptic patient comes to your clinic. She wants referral to neurologist. You tell her criteria for reference except.

A. Concurrent illness complicates

B. Control is poor

C. Drug side effect management

D. Pre conceptual advice

E. Seizure contained for > 2 year

e. Seizure contained for > 2 years - (Referral is not typically required for well-controlled epilepsy beyond two years; other options like pre-conceptual advice and side effect management are valid reasons for referral.)

27. A well controlled epileptic patient comes for routine check up & wants to stop medication. After how many fit free period you consider to stop medicine?

FREE SOURCE

A. 1 year

B. 3 year

C. 5 year

D. 8 year

E. 10 year

b. At annual review - Review care plan. Record fits and precipitating causes; check drug concordance (frequency of repeat prescriptions) and side effects; if fit free >2y, discuss withdrawing medication. OHGP 5th Ed Page 548

28. An epileptic patient comes with complain of gums swelling and ↓ memory. Which medicine is responsible for this?

A. Carbamazepine

B. Ethosuximide

C. lamotrigine

D. Phenytoin

E. Sodium valproate

d. Phenytoin - (Phenytoin is known to cause gingival hyperplasia and cognitive decline as side effects.)

29. An epileptic patient comes with complain of thinning of hairs and weight gain. Which medicine is most likely responsible for it?

A. Carbamazepine

B. Ethosuximide

C. lamotrigine

D. Phenytoin

E. Sodium valproate

e. Sodium valproate - (Valproate is associated with hair thinning (alopecia) and weight gain.)

30. A 61 yrs old patient present with tremors, difficulty in walking and initiating movements. He frequently spills tea on his clothes. He is a social drinker. What is single most appropriate diagnosis?

A. Alcohol withdrawal

B. Alzheimer's Disease

C. Essential tremors

D. Parkinson's disease

E. Thyrotoxicosis

d. Parkinson's disease - (Resting tremors, difficulty initiating movements, and bradykinesia are hallmark symptoms of Parkinson’s disease.)

31. A 6-year-old male is struck by a car while riding his bicycle. He is reported to be unconscious for 2 minutes following the accident. He is conscious and alert upon arrival to the

hospital, but within 45 minutes he begins to vomit and shortly thereafter he becomes completely unresponsive. Which of the following most likely explains this child's injury?

A. Acute subdural hematoma

B. Chronic subdural hematoma

C. Acute epidural hematoma

D. subarachnoid hemorrhage

E.Grade III concussion

c. Acute epidural hematoma - (A lucid interval followed by rapid neurological decline after trauma is characteristic of an epidural hematoma.)

32. A 65 years old man has resting tremors and mild slowing a movement. Supposing symptoms are because of Parkinson's disease. What will be the drug of choice for him according to NICE guidelines?

A. Amantadine

B. Trihexyphenidyl

C. Levodopa

D. Carbidopa

E. Selegiline

c. According to NICE guidelines, Levodopa is the drug of choice for treating Parkinson’s disease in older adults (above 65 years) who have motor symptoms such as resting tremors and bradykinesia.

33. A 17-year-old male to your clinic. He is brought to the ER by her mother. The patient has been completely well, healthy, and active prior to last night's headache. Nausea and vomiting began shortly after the headache onset. On examination, there is significant neck stiffness and drowsiness. He is afebrile. Based on history. What is the most likely diagnosis?

A. Subdural hematoma

B. Drug over dose

C. Subarachnoid hemorrhage

D. Bacterial meningitis

E. Viral meningitis

c. Subarachnoid hemorrhage - Typically sudden devastating headache (‘thunderclap headache’)—often occipital. Rarely (6%) preceded by a ‘sentinel headache’ representing a small leak ahead of the larger bleed. Vomiting/collapse with loss of consciousness ± fitting ± focal neurology follow. May be nothing to find initially on examination. Neck stiffness takes ~6h to develop. In later stages, may find ↓ level of consciousness, papilloedema, retinal or other intraocular haemorrhages, ± focal neurology. OHGP 5th Ed Page 535

34. A 40 years old smoker presents with first episode of jerky movements of left hand leading to generalized tonic - clonic seizure. On examination these is weakness of left forearm. He admits to having headache since 2 weeks. Which one test will you order in his case?

A. EEG

B. CT scan brain

C. Skull x-ray

D. MRI brain

E. Carotid Doppler

d. MRI brain - (MRI is the best imaging modality to investigate seizures with focal neurological signs and headache, suggesting an intracranial lesion.)

35. 50 years old woman presents to your clinic with headache for 3 weeks. She also has mild fever since 4 weeks. The headache is dull, continues, worsened by coughing, straining and present all around the scalp. She has diabetes since 8 years. What is the most likely diagnosis?

A. Tension headache

B. Viral meningitis

C. Encephalitis

D. Subarachnoid hemorrhage

E. Tuberculous Meningitis

e. Tuberculous meningitis - (Chronic headache, fever, and worsening symptoms over weeks, especially in a diabetic, suggest tuberculous meningitis.)

GATROENTEROLOGY

1. A 60 years old patient presents with epigastric pain after meals for the last two months. Pain is associated with bloating and heart burn. What is most appropriate next step?

A Refer for endoscopy

B. H. pylori eradication

C. Simethicone

D. Esomeprazole

E. H. pylori antibody testing

a. The 2017 ACG/CAG guidelines recommend upper endoscopy be performed for all patients 60 years or older who present with at least one month of dyspepsia symptoms. https://www.aafp.org/pubs/afp/issues/2020/0115/p84.html

2. A 50 years old patient presents with bloating & heart burn for last 6 month. Examination is normal. Her Hb is 8.2 mg/dl, MCV is 60 fl. MCHC is 28 g/dl. What is most appropriate next step?

A. Refer for endoscopy

B. H. pylori eradication

C. Ferrous sulphate

D. PPI iron therapy

E. H2RA+ iron therapy

a. Individual alarm symptoms (Unintentional weight loss, Vomiting, Bleeding or anemia, Dysphagia, and Abdominal mass) do not correlate with malignancy for patients younger than 60 years, and endoscopy is not necessarily warranted but should be considered for patients with severe or multiple alarm symptoms. https://www.aafp.org/pubs/afp/issues/2020/0115/p84.html

3. A 70 years male presents with difficulty in swallowing for the last two months. His first bite is easily swallowed but subsequently starts feeling difficulty in swallowing. He has been having re-current chest infection in the past. On examination neck swelling is palpable. What is most probable diagnosis?

A. Thyroid swelling

B. Esophageal achalasia

C. Globus hystericus

D. Pharyngeal pouch

E. Laryngeal pouch

d. Pharyngeal pouch (Zenker's diverticulum) - Food got stuck after first bite and caused dysphagia.

4. A patient of dyspepsia comes after a completion of H. pylori eradication therapy. What is the next most appropriate step?

A. Urea breath test immediately

B. Urea breath test after two weeks

C. Serology test immediately

D. Serology test two weeks after therapy

E. No need unless strong clinical symptoms

e. Do not retest after eradication, even if dyspepsia remains unless there is a strong clinical need. Retest if needed using a urea breath test. OHGP 5th Ed Page 354

5. A 20 years old athlete presents with recurrent jaundice since childhood usually after infections. What is the most specific diagnostic test?

A. Liver biopsy

B. Ultrasound liver

C. Fasting bilirubin

D. Hepatitis serology

E. Liver transaminases

c. Gilbert's syndrome - Inherited metabolic disorder causing unconjugated hyperbilirubinemia. Prevalence: ~1–2%. Onset is shortly after birth—but the condition may go unnoticed for years. Jaundice occurs during intercurrent illness. ↑ **bilirubin on fasting can confirm the diagnosis**. Liver biopsy is normal. No treatment is required and prognosis is excellent. OHGP 5th Ed Page 398

6. 45 years patient of coeliac disease presents with complaint of jaundice, pruritus, fatigue and polyarthralgia. On examination she has spider naevi, clubbing & hepatosplenomegaly. What is the single best diagnostic test?

A. ERCP

B. Ultrasound

c. Liver Biopsy

D. CT scan

E. Endomysial antibody

c. Liver Biopsy

7. A 30 years old patient is worried of her report showing anti HAV IgG positive. She had jaundice 1 year back. But no investigations were done at that time. What is her current state?

A. Incubation period

B. Acute infection

C. Carrier state

D. Recovery state

E. Chronic infection

d. Recovery state, Although IgG stays positive for about 2 years.

8. A 20 years old patient presents with blood report showing

Hep BsAg	Negative
Hep BsAb	Positive
Hep Bc IgG	Negative

Hep BeAg	Negative

What is her current state?

A. Chronic infection

B. Acute infection

C. Carrier state

D. Recovered state

E. Vaccinated

e. Vaccinated

9. A pregnant lady develops jaundice during first trimester. Her blood test shows Hepatitis bs Ag positive. What is the most appropriate next step?

A. Vaccinate mother

B. Immunoglobulins to mother

C. Termination of pregnancy

D. Immunoglobulin and vaccine to baby

E. Liver enzymes and vaccine to baby

d. Give hepatitis B immunoglobulin (HBIG) <2d after exposure to confer passive immunity to non-immune, high-risk contacts of infected patients (no effect after 7d). Hepatitis B vaccination is given as part of the routine UK childhood vaccination schedule for babies aged 2, 3, and 4mo. Babies born to hepatitis B +ve mothers are immunized <24h after birth (± HBIG). OHGP 5th Ed Page 718

10. A patient presented with report showing positive HBsAg, HBeAg & IgM core antibody. What is the state of patient?

A. Incubation period

B. Acute infection

C. Carrier state

D. Recover state

E. Vaccinated

d. Acute infection

11. Mr. Ahmad presents with watery explosive diarrhea and bloating. He has been on trip to hilly resort with his college mates 10-12 days back. He has no fever or blood in his stools. What is the most appropriate treatment?

A. Ciprofloxacin

B. Doxycycline

C. Cotrimoxazole

D. Loperamide

E. Metronidazole

e. Metronidazole – Giardiasis (explosive non bloody diarrhea, long history)

12. A patient presents with severe watery diarrhea from last 2 days. He is using clindamycin

for his acne for one week. What is the most appropriate cost-effective Treatment?

A. Loperamide

B. Metronidazole

C. Vancomycin

D. Doxycycline

E. Ciprofloxacin

b. Metronidazole is cost effective although vancomycin is also used in Clostridium Difficile associated pseudomembranous Colitis.

13. Mrs. Azam of 45 years presents with abdominal pain and chronic diarrhea. Her symptoms increase during the days of stress. Her lab workup is normal. Which of the following favors her diagnosis?

A. Nocturnal symptoms

B. Continuous symptoms

C. Intermittent symptoms

D. Significant weight reduction

E. Liquid stools with blood

c. Irritable bowel syndrome (IBS) is a chronic (>6mo) relapsing and remitting condition of unknown cause with symptoms including: abdominal pain or discomfort; bloating; and change in bowel habit.

14. Mrs. Amina seeks advice for her 6 years old daughter about vaccination. She is a diagnosed case of coeliac disease and she is on gluten free diet. Which vaccine is most recommendable for her?

A. Cholera Vaccine

B. Pneumococcal Vaccine

C. Meningococcal Vaccine

D. Influenza Vaccine

E. Typhoid Vaccine

b. Pneumococcal infection is more common 2° to hyposplenism—advise vaccination.

15. Mr. Ali is a marketing executive and presents with vomiting and paralysis in his limbs. He used the *canned food* last night. What could be the most probable organism causing this?

A. Salmonella typhi

B. Bacillus cereus

C. Clostridium botulinum

D. Cryptosporidium

E. Campylobacter jejuni

c. Clostridium botulinum

16. A 60 lady has symptoms of intermittent abdominal pain and loose stools Investigations

reveal:

Hb 8.5 g/dl

MCV 85 fl

WCC 6 x 10'g/L

Ferritin 20 (15-200) µmol/l

Folate 2 (3-20) µg/l

What investigation should be done?

A. Ultrasound of abdomen

B. Small bowel biopsy

C. Smooth muscle antibodies

D. ERCP

E. Rigid sigmoidoscopy

b. Small bowel biopsy – To rule out CA

17. 40 years old male comes with diarrhea from the last one and a half month. He has been to different doctors but of no use. You took history and found him to be a diabetic with poor control for the last ten years. What could be the most probable cause for his diarrhea?

A. Irritable bowel syndrome

B. Carcinoid syndrome

C. Autonomic neuropathy

D. Chronic malabsorption

E. Chronic pancreatitis

c. Autonomic neuropathy

18. A 55 years old lady comes with nausea and pain right upper quadrant. Her BMI is 30kg /m^2 and taking HRT for last one year. Her pulse 92/min, B.P 90/60 Temp. 98˚F. There is tenderness in right hypochondrium on deep palpation.

What is the most appropriate diagnosis? A. Cholangitis

B. Pancreatitis

C. Renal colic

D. Hepatitis

E. Biliary colic

e. Biliary colic (4Fs – Fat, Forty, Fertile and HRT additional risk)

19. A 46 years old diabetic male comes with abdominal discomfort and nausea after eating fried food. His BMI-28kg/m2 and takes alcohol 3 units /week. His ultrasound shows multiple gall stones of size more than 1 cm^2. What is the most appropriate next step in management?

A. Laparoscopic cholecystectomy

B. Open Cholecystectomy

C. Ursodeoxycholic acid

D. ERCP

E. Lithotripsy

a. Since the patient is symptomatic with gallstones, elective laparoscopic cholecystectomy is recommended. Ursodeoxycholic acid and lithotripsy are not effective for multiple large stones, and ERCP is only indicated if there is choledocholithiasis (CBD stones).

20. A 39 yrs old female comes with right upper quadrant pain since last 15 days. She has nausea and vomiting after taking heavy meals. Her BMI-28kg/ m^2. She is taking glibenclimide, metformin, frusemide, simvastatin and clofibrate. Which medicine is responsible for this condition?

A. Frusemide

B. Metformin

C. Simvastatin

D. Clofibrate

E. Glibenclimide

d. Clofibrate

21. A 55 years old male comes with nausea and fullness of abdomen after fatty meal. USG show gall stones and dilated bile ducts.

What test is most appropriate for further evaluation?

A. X ray

B. C.T scan

C. ERCP

D. MRI

E. Oral cholangiogram

c. ERCP

22. A 37 years old male present with severe epigastric pain radiating to back since one hour which is worse on lying down. He is feeling nausea. He drinks 4 units of alcohol per day. His pulse is =110/min, B.P is 100/60, temp 100˚ F. What is the single most likely diagnosis?

A. Gastroesophageal reflux

B. Acute Cholecystitis

C. Duodenal ulcer

D. Acute pancreatitis

E. Alcoholic hepatitis

d. Acute pancreatitis

23. A 40 yrs old male comes with severe pain in upper abdomen which is poorly localized radiating to back and increasing over 2 hrs. He has history of gall stones. He is a chronic smoker and alcoholic. His pulse is 120/min, B.P 100/60, R/R 22/min, Temp 100 ˚F. Which medicine would you prescribe for relief of pain?

A. Diclofenac

B. Morphine

C. Pethidine

D. Hyoscine

E. Ibuprofen

c. Admit as an acute surgical emergency. Prior to transfer give analgesia with pethidine (morphine may induce spasm of the sphincter of Oddi).

24. A 56 yrs old male comes with vomiting. weakness and episodic epigastric pain usually relieved by sitting forward. He has lost 3 Kg in last 6 month. He loves fried food and drinks alcohol 4 units /day. His blood sugar is 220 mg/dl, B.P 130/80 mm Hg. Pulse is 80/min and abdominal examination is normal. What will be the most appropriate diagnosis?

A. Alcoholic cirrhosis

B. Chronic Cholecystitis

C. Acute pancreatitis

D. Chronic pancreatitis

E. Pancreatic cancer

d. Chronic inflammation of the pancreas results in gradual destruction and fibrosis of the gland ± loss of pancreatic function ← malabsorption and DM. Alcohol is responsible for most cases Presentation: Constant or episodic epigastric pain radiating to the back and relieved by sitting forwards, Vomiting, Weakness, Jaundice,Steatorrhoea, Weight ↓, DM, Chronic poor health

25. 25. A patient with hepatitis C virus (HCV) infection presents with a detectable RNA viral load higher than 50 copies per mL and portal fibrosis and necrosis on liver biopsy. Which one of the following is recommended treatment?

A. Pegylated interferon plus Ribavirin.

B. Sofosbuvir + Velpatasvir

C. Pegylated interferon

D. Interferon alfa-2a plus Ribavirin.

E. Interferon alfa-2a

b. New regimen is: Sofosbuvir + Velpatasvir

26. A 25-year-old school teacher presents with nausea, vomiting, anorexia and right upper quadrant pain for the past 3 days. Two of the students in her class have come down with similar symptoms. Her pulse is 100/min, BP 110/70, respirations 18, temperature 101° F. Her sclera are icteric, her liver edge is tender. Her SGPT is 1440 (<55).

Which one test will you order to confirm your diagnosis?

A. Anti- HAV IgG

B. Anti-HAV-IgM

C. Anti HCV antibody

D. Anti-HBV s antigen

E. Anti HEV IgM

b. Common. Spread: faecal–oral route. Patients are infectious 2wk before feeling ill. Incubation is 2–7wk (average 4wk). High-risk groups: travellers to high-risk areas, institutional inhabitants and workers, IV drug abusers, patients with high-risk sexual practices. May be asymptomatic (especially young children) or present with fever, malaise, fatigue, anorexia, nausea/vomiting, abdominal pain, diarrhoea, tender hepatomegaly, pale stools, dark urine, and/or jaundice (70–80% adults). IgM antibodies signify recent infection. Immunity follows infection, and IgG remains detectable lifelong. Management is supportive. Avoid alcohol until LFTs are normal. Most recover in <2mo. Hepatitis A does not cause chronic liver disease; there is no carrier state

27. 27 years old University Student complains of jaundice since 2 days. He has also lost appetite and has fever.

His investigations show:

Total Bilirubin 5.6

Direct Bilirubin 2.8

Indirect Bilirubin 3.8

SGPT 2480

Alkaline Phosphatase 475

What is the most likely diagnosis?

A. Liver abscess

B. Obstructive jaundice

C. Gilbert's syndrome

D. Hemolytic jaundice

E. Acute viral hepatitis

e. Acute viral hepatitis, most likely Hepatitis A (HAV).

28. A nurse comes into you clinic and tells you that he had a prick from the needle of a Hep B Ag positive patient 5 minutes ago. He is not Hep B vaccinated. How would you manage this patient provided there are no financial constraints?

A. Hepatitis B Vaccine

B. Interferon therapy + Ribavirin

C. Immune globulins

D. Immune globulins + vaccine

E. Observe for six month.

d. If exposed person is **unvaccinated** - HBIG x 1 and initiate HB vaccine series, https://www.cdc.gov/mmwr/PDF/rr/rr5011.pdf

RECOMMENDED POSTEXPOSURE PROPHYLAXIS FOR EXPOSURE TO HEPATITIS B VIRUS - CDC

Vaccination and antibody response status of exposed workers	Treatment		
	Source HBsAg Positive	Source HBsAg Negative	Source Unknown or Not Available for Testing

Unvaccinated	HBIG x 1 and initiate HB vaccine series	Initiate HB vaccine series	Initiate HB vaccine series
Previously Vaccinated			
Known responder	No treatment	No treatment	No treatment
Known non-responder	HBIG x 1 and initiate revaccination or HBIG x 2	No treatment	If known high-risk source, treat as if source were HBsAg positive
Antibody Response Unknown	Test exposed person for anti-HBs 1. If adequate, no treatment is necessary 2. If inadequate, administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate, no treatment is necessary 2. If inadequate, administer vaccine booster and recheck titer in 1–2 months

29. Mrs. Malik is a manager in a bank is found to be Hepatitis C positive and is under interferon therapy since 4 months. She tells you that she has been losing hair, gaining weight and having puffiness of eyes.

Which single test would you advise in order to make a diagnosis?

A. Creatinine

B. Urine analysis

C. Ultrasound KUB

D. Blood Sugar

E. TSH

e. TSH

30. A 32 years old woman is HBsAg positive and gives birth to a baby. The mother asks your advice regarding breast feeding her infant. What would you tell her?

A. Can breast feed like any other mother

B. She should express milk and feed with up and spoon.

C. Get treatment for Hepatitis B first and then start breast feeding.

D. Should wait for 3 doses of vaccine to the infant and then start breastfeeding

E. Breast feeding is contraindicated for Hepatitis B positive mothers

a. Can breast feed like any other mother

A 34 years old man comes 1 week after receiving treatment for H. pylori eradication Which of the following types of H. pylori testing is not useful for confirming eradication?

A. Stool antigen test

B. Urea breath test

C. H. pylori serology

D. Culture of stool

E. Gastric biopsy specimen

c. H. pylori serology

31. A 50 years old lady complains of epigastric burning pains due to stress. She finally undergoes gastroscopy which shows gastro-esophageal reflux. Which medication is the most effective for her condition?

A. Famotidine

B. Bismuth

C. Gaviscon

D. Magnesium trisilicate

E. Pantoprazole

e. Pantoprazole – 1st Line

32. A 17 years old boy comes for hepatitis B vaccination. He had received his first dose of vaccine 7 years ago. What is the single most appropriate step?

A. Restart vaccination

B. Resume vaccination

C. Give three doses one month apart

D. Check Hep B s antibody

E. Check Hep B s antigen

b. Resume vaccination

33. A diagnosed patient of Crohn's disease comes to discuss his smoking & drinking habits & their effects on his disease. What is correct statement regarding Crohn's disease?

A. Smoking has harmful effect

B. Alcohol has harmful effect

C. Alcohol & smoking have no effect.

D. Smoking has protective effect.

E. Alcohol has protective effect.

a. Smoking has harmful effect

34. A known patient of arthritis who is recently diagnosed as ulcerative colitis. He is taking Aspirin for his arthritis from last 6 months. What would be your advice regarding the use of aspirin.

A. Change Aspirin to ibuprofen

B. Add P.P.I

C. Add misoprostol

D. Injectable Diclofenac sodium

E. Stop Aspirin

e. Aspirin causes flare ups of UC

35. 50 year old patient presents with a complaint of passing 4-6 loose stool containing blood

for six months. She has low abdominal pain, fecal urgency, incontinence and painful red swelling on her shin. What is the most likely diagnosis?

A. Ulcerative colitis

B. Crohns Disease

C. Amoebic colitis

D. Diverticulitis

E. Irritable Bowel syndrome

a. Ulcerative colitis 👇

INFLAMMATORY BOWEL DISEASE (IBD) COMPARISON

Ulcerative Colitis		**Crohn's Disease**
Colon and rectum; normally does not spread beyond ileum	**Location**	Entire digestive tract - mouth to anus; Perianal disease in ~50%
Superficial mucosal inflammation	**Degree of Inflammation**	Transmural inflammation
Crypt abscesses, depletion of goblet cells	**Histology**	Granulomas, increased goblet cells
Protective factor	**Smoking**	Aggravating factor
• Erythema nodosum • Pyoderma gangrenosum • Arthritis • Ocular manifestations	**Extraintestinal Manifestations**	• Arthritis • Ocular manifestations (Iritis, Uveitis)
Continuous lesions, pseudo polyps	**Endoscopy**	Skip lesions, deep ulcers, cobblestone appearance
• Toxic megacolon • colorectal cancer	**Complications**	• Intraabdominal masses • Strictures, fissures, fistula, venous thromboembolism, • Colorectal cancer
Primary sclerosing cholangitis (PSC)	**Associations**	• Gallstones • Autoimmune Hepatitis • Osteoporosis • Amyloidosis
Mesalazine • 5-ASA – If rectal symptoms • Prednisolone – If prompt response needed	**Treatment**	Mesalazine – less effective than UC • Steroids if unresponsive to Mesalazine

• Azathioprine – If Recurrent attacks (> 2 steroid courses/ year) and relapse < week of stopping steroids		

36. 45 year old patient presents with perianal abscesses for the last 1 week. He is passing 3-4 stools containing blood for last 7 months, there is anal skin tag & mass is palpable in R.I.F. What is the most likely diagnosis?

A. Ulcerative colitis

B. Crohn's Disease

C. Amoebic colitis

D. Diverticulitis

E. Irritable Bowel syndrome

b. Crohn's Disease☝

37. 30 years old patient of Crohn's disease presents with backache which is worse in the morning. There is a decreased spinal movement. What is the most likely diagnosis?

A. Reactive arthritis

B. Ankylosing spondylitis

C. Spinal stenosis.

D. Paget's disease

E. Cauda Equina syndrome

b. Ankylosing spondylitis – young, decreased flexion, worse backache in morning, bamboo spine on Xray.

38. 55 years old known case of Ulcerative Colitis presents with fever, jaundice, skin rash & polyarthritis His A.S.T is 150 IU & Alk PO4 is 250 I.U.

What is the most likely diagnosis?

A. Primary Biliary Cholangitis

B. Primary sclerosing cholangitis

C. Auto immune Hepatitis.

D. Viral Hepatitis.

E. Drug induced hepatitis.

c. Primary sclerosing cholangitis

39. 40 years old patient suspected of inflammatory bowel disease presents with loose motions with bleeding for last 2 months His pulse rate is 100/min, temperature 101 ˚F. Which of following test is contraindicated?

A. Erect X ray abdomen

B. Sigmoidoscopy

C. Rectal biopsy

D. Barium Enema

E. Colonoscopy

d. Barium Enema – is contraindicated in patients with acute colitis because of the risk of precipitating toxicity.

40. 40 year patient of crohn's disease presents with 8 motions per day. Examination shows generalized abdominal tenderness, temperature is 101 ˚F, R/R 24/ min, pulse 100/min. What is next appropriate step?

A. Ciprofloxacin

B. Mesalazine

C. Azathioprine

D. Prednisolone

E. Admit immediately

e. Admit immediately – Tenderness suggesting perforation/ peritonitis

41. 28 years old patient presents with motions for 2 days, on examination is 101˚ F, R/R 24/min Pulse is 100 /min. What is the next step in management?

A. Ciprofloxacin

B. Mesalazine

C. Azathioprine

D. Prednisolone

E. Admit immediately

a. Ciprofloxacin – No comorbid, probably enteritis (infective gastroenteritis)

42. 30 years old patient presents with severe vomiting diarrhea & abdominal pain 2 hours. after attending a Bar BQ party. On examination temp is 98 ˚F pulse 100/min & BP 80/60mmHg. Which organism is most likely responsible for it?

A. C. Perfringens

B. Salmonella

C. E. Coli

D. Cryptospridium

E. Staph aureus

e. Staph aureus, incubation, 1-6 hrs, C. Perfringens also caused by meat but incubation period is 6-24 hrs and similarly, salmonella incubatrion period is 12-48 hrs.

43. A patient of Ulcerative Colitis comes for advice regarding maintenance therapy. The most appropriate choice is.

A. Mesalazine

B. Azathioprine

C. Prednisolone

D. Ciclosporin

E. Methotrexate

a. Maintenance treatment - Follow-up in 2° care is routine. Most patients require lifelong therapy. Mainstays of treatment are 5-ASA derivatives (e.g. mesalazine 1–2g/d or balsalazide 2.5g/d). Use a rectal formulation (e.g. mesalazine 1g/d PR) if disease is confined to the rectum or descending colon. Long-term treatment ↓ risk of colonic cancer by 75%. 10% are intolerant to 5-ASA derivatives—alternative is azathioprine (see earlier in topic). Treat proximal constipation with stool bulking agents or laxatives. NSAIDs can precipitate relapse so avoid.

44. 60 years old male presents with abdominal fullness, loose motions containing mucus & pain for last 6 weeks. His symptoms relieve by defecation and aggravates by stress & dairy products. What is most appropriate management.

A. Mebeverine

B. Loperamide

C. Amitriptyline

D. Avoid dairy products

E. Refer to gastroenterology

e. Refer urgently (to be seen in <2wk) to a team specializing in lower GI malignancy:
Any age: Rectal or abdominal mass consistent with involvement of large bowel. A pelvic mass outside the bowel warrants urgent referral to a urologist or gynaecologist, Rectal bleeding AND abdominal pain or change in bowel habit, weight ↓ or iron deficiency anaemia
Aged ≥40y: With unexplained weight ↓ and abdominal pain
Aged ≥50y: With unexplained rectal bleeding
Aged ≥60y: With iron deficiency anaemia or changes in bowel habit or tests showing faecal occult blood in their faeces

45. 24 years old patient presents constipation, abdominal pain, bloating & feeling of incomplete evacuation for last 2 year. Symptoms increased during her exams. Examination & investigations are insignificant. The best choice for her constipation.

A. Ispaghula Husk

B. Lactulose

C. Co phenotrope

D. Senna

E. Enema

a. Soluble fibers (Ispaghula Husk) advised, non-soluble not given

46. A 36 yrs old male comes with Central abdominal pain which is colicky in nature associated with distension of abdomen. Relieved by vomiting. He has not passed flatus for the last one day.

His pulse 100/min, Temp-99.6˚F, R/R-26/min. BP-100/60mmHg

No guarding, active tinkling gut sound. What is possible diagnosis?

A. Acute intestinal obstruction

B. Diverticulitis

C. Ischemic bowel

D. Inflammatory bowel disease

E. Sigmoid volvulus

a. Acute intestinal obstruction - Presentation: Anorexia; nausea; vomiting (may be feculent) gives relief; colicky central abdominal pain and distension; absolute constipation for stool and gas (though if high obstruction constipation may not be absolute). Examination: uncomfortable and restless; abdominal distention ± tenderness (though no guarding/rebound); active tinkling bowel sounds or quiet/absent bowel sounds (later).

47. A 65 years old male known case of valvular heart disease comes with sudden onset of abdominal pain which rapidly becomes severe over 1 hr. He has history of pain after meal. O/E generalized tenderness, no guarding. What will be the diagnosis?

A. Diverticulitis

B. Intestinal obstruction

C. Ischemic bowel

D. Perforated appendix

E. Sigmoid volvulus

c. Ischemic bowel – Sudden onset of abdominal pain which rapidly becomes severe. There may be a prior history of pain worse after meals (mesenteric angina). Rarely presents with PR bleeding. *Examination*: very unwell; shocked; may be in AF; generalized tenderness but normally no guarding/rebound. Often signs are out of proportion to symptoms. Give opioid analgesia. Admit as surgical emergency. OHGP 5th Ed Page 373

48. A 37 years old female comes with sudden onset of abdominal distension and colicky abdominal pain with absolute constipation. She is taking bisacodyl tablets for her constipation and lorazepam for last 6 months regularly. What will be the diagnosis?

A. Intestinal obstruction

B. Ischemic bowel

C. Intussusception

D. Perforation of gut

E. Sigmoid volvulus

e. Sigmoid volvulus - Occurs in people who have redundant colon on a long mesentery with a narrow base. The sigmoid loop twists causing intestinal obstruction. The loop may become ischaemic. *Risk factors*: constipation, laxatives, tranquillizers. Presents with acute onset of abdominal distention and colicky abdominal pain with complete constipation and absence of flatus. There may be a history of repeated attacks. OHGP 5th Ed Page 373

49. A 60 years old male comes with altered bowel habit, colicky pain in left side of abdomen for last one day. Relived by defecation. O/E there is guarding in left iliac fossa. He has fever 100F. He usually takes fast food. What will be the diagnosis?

A. Acute appendicitis

B. Acute diverticulitis

C. Irritable bowel syndrome.

E. Mesenteric obstruction

b. Acute diverticulitis - Presents with, Altered bowel habit, Colicky left-sided abdominal pain—may become continuous and cause guarding/peritonism in the left iliac fossa, Fever, Malaise ± nausea

Flatulence, There may be few abdominal signs in the elderly. Treat with oral antibiotics (e.g. co-amoxiclav 250mg tdsor cefaclor 250–500mg tds and metronidazole 400mg bd or ciprofloxacin 500–750mg bd), There may also be some benefit from a low-residue diet If severe symptoms, uncertain diagnosis, or not settling, admit as an acute surgical emergency. OHGP 5th Ed Page 373

50. A 30years old male comes with loose motion. for last 6 weeks. He also has bleeding per rectal for 7 weeks. His Hb-10g/dl, pulse-82/min, BP-100/60mmhg. What will be next step?

A. Tranexamic acid

B. Ciprofloxacin

C. Loperamide

D. Refer urgently

E. Refer Routinely

d. Refer urgently – (to be seen in <2wk) To a team specializing in colorectal cancer if Any age + anal, rectal, or abdominal mass, **Any age + rectal bleeding + unexplained abdominal pain, change in bowel habit, weight loss, or iron deficiency anaemia**, Aged ≥40y + unexplained weight loss + abdominal pain, or Aged ≥50y + unexplained rectal bleeding, or Aged ≥60y + iron-deficiency anaemia or persistent change in bowel habit or faecal occult blood +ve, A pelvic mass outside the bowel warrants urgent referral to a urologist or gynaecologist. OHGP 5th Ed Page 378

51. 62 years male diagnosed as acute diverticulitis. What treatment will you advise him?

A. Cefaclor

B. Ciprofloxacin

C. Doxycycline

D. Metronidazole

E. Cotrimoxazole

b. Ciprofloxacin, if asked combination – combination with metronidazole is best.

52. A 23 years old patient presents with severe pain on defecation and spotting on the toilet paper with fresh blood. She hesitates to pass stool; her stools are hard. She refuses the physical exam. What is the most promising conservative management step for this case?

A. Glyceryl trinitrate ointment

B. Corticosteroid ointment

C. Local anesthetic ointment

D. Refer her for surgery

E. Examination under anesthesia

a. Anal Fissure - Anal mucosa is torn, Soften stool (e.g. ispaghula husk); try analgesic suppositories/cream (e.g. cinchocaine/hydrocortisone). If unsuccessful add glyceryl trinitrate 0.4% ointment bd which relieves pain and spasm but may cause headache; 2% topical diltiazem cream bd is a 3rd-line option (unlicensed). If interventions fail refer for surgical review. OHGP 5th Ed Page 374

53. 28 years old man comes with recurrent perianal abscesses and persistent perianal discharge and loose motions for last four months. He has been thrice operated for these

abscesses, but the area is not healing and his surgical wounds are becoming bigger with purulent discharge. What could be the possible cause for his recurrent infections?

A. Ulcerative colitis

B. Pilonidal sinus

C. Crohn's disease

D. Chronic Amoebiasis

E. Fistula in Ano

c. Complications of Crohn's disease - Intra-abdominal abscess, Intestinal stricture—common—may require surgery, Toxic megacolon—rare (see UC), Bowel obstruction, Fistula formation, Perianal disease, Malignancy—large and small bowel cancer—5% 10y after diagnosis, Osteoporosis. OHGP 5th Ed Page 388

54. A 55 years old HIV positive man has a fungating mass growing out of anus with enlarged lymph nodes in groins. He also C/O itching and change in his bowel habits. What will be your ideal management step?

A. Cautery for lesion

B. Cryotherapy for lesion

C. Podophyllum ointment

D. Urgent surgical referral

E. Serology for S.T.I's

d. Anal Cancer - Usually squamous cell cancer (>50%). Risk factors: anal sex; syphilis; anal warts (HPV). Presents with bleeding, pain, anal mass or ulcer, pruritus, stricture, change in bowel habit. A mass may be palpable on rectal examination. Check for inguinal LNs. Refer for urgent surgical review and confirmation of diagnosis. Treatment is usually with a combination of radiotherapy ±chemotherapy. Abdominoperineal resection is reserved for salvage therapy after chemo or radiotherapy failure. OHGP 5th Ed Page 375

55. A mother of 6 months old baby comes that her baby is having a problem of recurrent red mass coming down through the anus with anal discharge since few weeks. The child has constipation from the last two months. How will you deal this patient?

A. Treat his constipation

B. Give him an outline injection

C. Refer him to surgeon

D. Liquid paraffin

E. Manual reduction after local anesthetic

c. These symptoms suggest significant rectal prolapse rather than a simple, transient issue.

56. Mr. Khan 35 years old complaints constipation off and on, he says he does not pass stool daily rather sometimes after 2 or 3 days. How will you treat him?

A. Lifestyle measures

B. Lactulose

C. Codenthrusate

D. Senna

E. Glycerin suppositories

a. Treat organic causes. Otherwise:

- Give lifestyle advice—↑ fluid intake to ≤2L/d (8–10 cups); avoid alcohol; ↑ exercise if possible; add fibre to diet (↑ fruit/vegetables, eat wholegrain foods, add bran/oats); open bowel when needed
- If lifestyle advice fails and symptoms cause distress, start a bulk-forming laxative, e.g. ispaghula husk (avoid in opioid constipation). If this fails, try an osmotic laxative, e.g. a macrogol or MgOH 15mL bd
- If an osmotic laxative fails, try a short course of stimulant laxative, e.g. senna 1–2 tablets at 5 p.m. either alone or in combination with an osmotic laxative. Long-term use of some stimulant laxatives is reported to cause cathartic atonic colon. Although this is unlikely in young, fit patients only use short courses or use intermittently, e.g. twice weekly

If still constipated, specialist referral is warranted. OHGP 5th Ed Page 351

57. A 35 years old man comes with pain in lower abdomen with constipation bloating. His pain is relieved after defecation. Which laxative will make his bloating worse?

A. Osmotic laxatives

B. Stimulant laxative

C. Bulk forming agents

D. Co-danthrusate

E. Bisacodyl enemas

a. Osmotic laxatives (Lactulose).

58. A 44 years old patient presents with progressive constipation from the last few months. He has tried different treatments without success.

What will be your next most appropriate step?

A. Give him osmotic laxative

B. Send him for colonoscopy

C. Give him stimulant laxative

D. Treat him with glycerin suppositories

E. Advise him for phosphate enema

b. Send him for colonoscopy

59. Mr. John, 60 years is a known patient of multiple myeloma for the last 6 months. Now he comes to you for his constipation. What could be the most probable cause for his constipation?

A. Anti-cancer treatment

B. Hypercalcemia

C. Metastasis to gut

D. Bone marrow suppression

E. M-proteins in serum

b. Hypercalcemia

60. 70 years old, Taj Din comes with complain of constipation. He is taking different drugs for his multiple problems. Which of the following drug is least likely cause of his constipation?

A. Paracetamol

B. Amitriptyline

C. Chlorothiazide

D. Amlodipine

E. Cough mixture

a. Paracetamol

61. A 9 months old baby girl is brought for her umbilical swelling. The lump is soft, rounded, skin colored and 1 cm in diameter. What advise will you give to her mother?

A. Refer her for surgical repair

B. Tape or strap the swelling

C. Give her some anti flatulent

D. Wait for 2 years for spontaneous recovery

E. Ask the mother to reduce it when it

d. Umblical hernia - Common. Presents as a bulge at the umbilicus. Painless and reducible, but more prominent when the baby cries. Due to a defect in the umbilical ring when the cord separates. More common in people of black ethnic origin, premature and low birthweight babies, and associated with certain syndromes (e.g. trisomy 13 and 18 or 21). Usually resolves spontaneously. Strangulation is rare. Refer for surgery if an umbilical hernia persists until >4y of age. OHGP 5th Ed Page 351

62. A young man of 18 is found to have a right inguinal swelling on routine checkup. The right external inguinal ring is about 2.5 cm in diameter and hernial bulge can be easily seen and felt going down into his scrotum while coughing. He is completely asymptomatic. What will be most appropriate step in management?

A. Advise him to avoid straining

B. Reassure and advise to come back if symptomatic

C. Refer him for surgical repair

D. Advise him to use a truss

E. Refer him for repair of external inguinal ring repair

c. More common in premature, low birthweight, and male babies. Non-acute History of intermittent groin ± scrotal swelling—the spermatic cord may be thickened on the affected side. Refer to paediatric surgery for repair (herniotomy). Risk of strangulation is greatest in first year, particularly in premature babies, and ↓ with age. OHGP 5th Ed Page 868

OBGY

1. A 60 years old female presents with history of itching and white plaques on vulva since last 2 months. The skin of vulva looks atrophic and vaginal mucosa is normal. What should be the first step in the management of this case?

A. 1% Hydrocortisone cream

B. Biopsy

C. Cautery

D. Clotrimazole cream

E. Reassurance

b. Persistent vulvar itching and white plaques in a postmenopausal woman warrant a biopsy to rule out lichen sclerosus, VIN, or malignancy. If lichen sclerosus is confirmed, high-potency topical steroids (clobetasol 0.05%) are the first-line treatment. Regular follow-up is required due to the risk of vulval cancer transformation.

2. A 28 year old female presents with history of cyclical pelvic pain, dyspareunia, menorrhagia and infertility. Uterus is normal sized, immobile, retroverted and nodular. What is the single most appropriate confirmatory test?

A. Detailed History

B. Hysteroscopy

C. Laparoscopy

D. Pelvic Examination

E. Pelvic USG

c. According to NICE guidelines: Laparoscopy is the gold standard for confirming endometriosis, especially in women with cyclical pelvic pain, dyspareunia, menorrhagia, infertility, and a retroverted, immobile, nodular uterus. It allows direct visualization and biopsy of endometrial implants, adhesions, and ovarian endometriomas, aiding in both diagnosis and treatment.

3. A 15 years old girl presents with history of lower abdominal pain and cramps starting on 1st day of the cycle associated with vomiting and diarrhea and preventing her from attending the school for one and a half year. What should be the first step in the management of this girl?

A. NSAIDS

B. OCPs

C. Pelvic USG

D. Reassurance

E. Referral

a. Primary dysmenorrhea - No underlying pelvic pathology. Starts 6–12mo after menarche when ovulatory cycles are established. Presents with lower abdominal cramps ± backache which occur in the first 1–2d of each period. May be associated GI disturbance, e.g. diarrhoea/vomiting.. Treatment is with: NSAID (e.g. mefenamic acid 500mg tds, ibuprofen 200–400mg tds)—effective in 80–90%; start with bleeding and continue until pain abates, CHC or desogestrel POP—effective in 80–90%, 10–20% do not respond—consider a missed cause; consider referral. OHGP 5th Ed Page 691

4. A 32 year old female comes to your office with history of amenorrhea for the last 8 months. Her pregnancy test is negative. While taking her history which question is least important?

A. Discharge from nipples

B. Recent use of pills

C. Skin changes

D. Smoking

E. Weight loss

d. While smoking is relevant in general health, it is the least important factor in evaluating secondary amenorrhea. Key history points include nipple discharge (hyperprolactinemia), recent use of pills (post-pill amenorrhea), skin changes (PCOS or thyroid dysfunction), and weight loss (hypothalamic amenorrhea or eating disorders). Smoking has minimal direct impact on menstrual irregularities compared to these factors.

5. A 24 years old married woman presents with acne, hirsutism, irregular cycles and obesity. Which one of the following is not recommended in management of her problem?

A. Clomiphene

B. Estrogen

C. Metformin

D. Oral contraceptive pills

E. Spironolactone

b. Estrogen alone is not recommended in the management of Polycystic Ovary Syndrome (PCOS) as it does not address the underlying hormonal imbalance. First-line management includes lifestyle modifications for weight control. OCPs help regulate cycles and reduce hyperandrogenism, spironolactone is used for hirsutism, clomiphene induces ovulation in infertility, and metformin improves insulin resistance. Estrogen alone lacks these benefits and is not used in PCOS management.

6. A 28 years old married female presents with irregular menstrual cycle, excessive hair growth, weight gain and infertility. You order some blood tests. Which one is the unlikely report?

A. Decreased levels of FSH

B. Increase in Serum Testosterone

C. Increase levels of FSH

D. Increased levels of Insulin

E. Increased levels of LH

c. According to NICE guidelines: Polycystic Ovary Syndrome (PCOS) is characterized by increased LH levels, increased testosterone, and insulin resistance, leading to weight gain, hirsutism, and irregular cycles. FSH levels are usually normal or low, as the LH:FSH ratio is typically >2:1, due to an excess of LH. An increase in FSH is unlikely in PCOS

7. A 31 year old female complains of irritability, backache sadness, fatigue, headache and occurring few days before her periods since last few years. Symptoms improve with menstruation and a week following it but are so severe that day-to-day living and social life is affected. Her husband died 4 months back. What is the most likely diagnosis?

A. Depression

B. Dysthymia

C. Mittelschmerz syndrome

D. Post traumatic stress syndrome

E. Premenstrual Syndrome

e. The most likely diagnosis is Premenstrual Syndrome (PMS). PMS is characterized by cyclical mood and physical symptoms that occur in the luteal phase of the menstrual cycle and resolve shortly after menstruation. Symptoms include irritability, fatigue, backache, and headache, significantly impacting daily life. management exercise, cognitive behavioral therapy (CBT), Vit B_6, SSRIs (e.g., sertraline), Spirolonolactone for breast tenderness. OHGP 5th Ed Page 680

8. A 26 years newly married woman presents with irritability, abdominal bloating and breast tenderness few days before her menses and subside with start of menses. Which of the following is the most appropriate drug for her symptoms?

A. Bromocriptine

B. Oral contraceptive

C. Progesterone

D. Sertraline

E. Spironolactone

e. Spironolactone is a diuretic that can help with bloating and breast tenderness. OHGP 5th Ed Page 681

9. A 27 year old married female presents with severe itching and burning of vulva for a few days associated with painful micturition. On examination you find edematous, tender vulva with multiple shallow *painful ulcers*. What is the most likely diagnosis on clinical grounds?

A. Chancroid

B. Genital herpes

C. Lymphogranuloma inguinale

D. Lymphogranuloma vanereaum

E. Syphilis

b. Genital herpes - HSV is transmitted by direct contact with lesions. Lesions may appear anywhere on the skin or mucosa but are most frequent around the mouth, on the lips, conjunctiva, cornea, and genitalia. May be asymptomatic. If symptomatic, history and examination are diagnostic in 90% cases. Presents with multiple painful genitalulcers on a red background ± inguinal lymphadenopathy <1wk after sexual contact. Lesions crust over then heal. Untreated lasts 3–4wk. *Complications*: urinary retention, aseptic meningitis. OHGP 5th Ed Page 724

10. A 30 years old female presents with reddish brown spots on her skin, alopecia, fever, enlarged lymph nodes and malaise. She has multiple sexual partners. What will be the most appropriate initial investigation?

A. Biopsy of lymph node

B. Dark Field microscopy

C. FTA-ABS

D. MHA-TP

E. VDRL

e. The patient's symptoms—reddish-brown spots (maculopapular rash), alopecia, fever, lymphadenopathy, and a history of multiple sexual partners—are suggestive of secondary syphilis. VDRL is a non-treponemal test used for initial screening of syphilis. If positive, it should be confirmed with a treponemal-specific test (e.g., FTA-ABS or MHA-TP). Dark field microscopy is useful for primary syphilis (chancre) diagnosis, but not for secondary syphilis.

11. A 30 yrs old, sexually active female comes with history of Pruritic vulva, superficial dyspareunia & vaginal discharge for two months. On examination thick cheesy discharge with cracked vulva is seen. What is the single best treatment for her?

A. Cap Fluconazole 300 mg

B. Clindamycin Pessaries

C. Clotrimazole Pessaries

D. Metronidazole 2 g stat

E. Metronidazole Pessaries

c. Candidiasis - Only treat if symptomatic. Sexual transmission is minimal; there is no benefit from treating the partner unless overt infection:

- Try clotrimazole pessaries—cure rate ~90%
- Alternative is oral fluconazole 150mg stat, repeated after 3d if severe infection. Contraindicated in pregnancy or lactation—83% cure rate. OHGP 5th Ed Page 713

12. A 25 yr old married woman presents with foul smelling offensive greyish vaginal discharge Smear shows clue cells. What is the most probable diagnosis?

A. Bacterial vaginosis

B. Chlamydial infection

C. Gonococcal cervicitis

D. Trichomonas Vaginalis

E. Vaginal Candidiasis

a. Bacterial vaginosis - Grey/white, thin, fishy-smelling, offensive discharge with no vulval soreness. On examination, the cervix looks normal; pH of secretions is >4.5. HVS for M,C&S may confirm diagnosis but treat without swab if no examination is carried out, or pH is >4.5 and typical clinical picture. First-line treatment is oral Metronidazole 400–500 mg twice daily for 5–7 days or 2g single dose or clindamycin 2% cream 5g nocte PV for 1wk. OHGP 5th Ed Page 713

13. A 34 yrs old married female comes to your clinic with history of profuse, frothy irritating vaginal discharge. Smear reveals flagellates, the first line of treatment would be?

A. Cap Doxycycline

B. Clotrimazole passeries

C. Inj Ceftriaxone 250 mg

D. Tab Ciprofloxacin

E. Tab Metronidazole

e. Women 10–50% are asymptomatic. Symptoms: vaginal discharge, vulval itching, dysuria, offensive odour, low abdominal discomfort, vulval ulceration. Examination: 5–15% have no abnormalities; common findings include: vaginal discharge (~70%; classical frothy yellow discharge in 10–30%); vulvitis; vaginitis; 2% have classic 'strawberry cervix'. Send HVS from the posterior fornix at the time of speculum examination for M,C&S and NAAT. First-line treatment is with metronidazole (400–500mg bd po for 5–7d or 2g po stat)—tinidazole 2g po stat is an alternative. If treatment fails, repeat 7d course of metronidazole. If second course fails, try metronidazole or tinidazole 2g po daily for 7–10d or metronidazole 800mg tds po for 7d. OHGP 5th Ed Page 716

14. A young Lady brings the report of her Pap smear. The report shows mild dysplasia.

What will you suggest to the patient?

A. Reassurance

B. Refer to Gynecologist.

C. Repeat pap smear right now

D. Repeat smear after 6 months

E. Urgent colposcopy

d. Repeat smear after 6 months

CERVICAL CANCER SCREENING – PAP SMEAR

	Reagen (WHO)	Ruchart	Treatment
Class 1	Negative	Negative	Routine screening
Class 2	Inflammation	-	Routine screening
Class 3	Mild dysplasia	CIN-1 (HPV)	**Repeat every 6 months (If Pap Alone)**, Refer if HPV +
Class 4	Moderate dysplasia Severe dysplasia Carcinoma in situ	CIN-II, CIN-III	Referral
Class 5	Invasive cancer	Invasive cancer	Referral

15. A visibly upset mother comes to your clinic complaining that her 14 years old daughter who had menarche 2 years back has irregular cycle with heavy flow and dysmenorrhea. What is the most likely diagnosis?

A. DUB

B. Fibroid

C. PCO

D. PID

E. Polyp

a. The most likely diagnosis in a 14-year-old girl with irregular cycles, heavy flow, and dysmenorrhea soon after menarche is Dysfunctional Uterine Bleeding (DUB), now termed Abnormal Uterine Bleeding (AUB) in Adolescents.

16. 40 years old female presents with H/O heavy, painful periods and inter-menstrual bleeding What is the most appropriate management option?

A. Mefenamic acid

B. Progestogen

C. Reassurance

D. Referral

E. Transamine

d. A 40-year-old female with heavy, painful periods and intermenstrual bleeding requires further evaluation to rule out structural or pathological causes (e.g., fibroids, polyps, endometrial hyperplasia, or malignancy).

17. An 18 years old girl comes to your clinic with history of unprotected sex 3 days ago. The best management option would be:

A. 4 OCPs stat

B. Copper IUCD

C. D&C

D. Levonorgestrel

E. Progesten IUCD

b. Copper IUD: Most effective option; can be inserted up to 5 days post-UPSI and provides ongoing contraception.

18. A 35 years old woman who is on oral contraceptive pills since last 3 years presents with pain and swelling in left calf since 2 days. What is the most appropriate initial step in management?

A. Cloxacillin

B. Elastic stocking

C. Reassurance

D. Reduce dose of OCP

E. Stop OCP

e. According to NICE guidelines, a woman on OCPs with calf pain and swelling raises suspicion of deep vein thrombosis (DVT), especially as OCPs increase the risk of venous thromboembolism (VTE).Initial Management:

- Stop OCP immediately to reduce thrombotic risk.
- Assess for DVT using Well's score (if high probability, proceed to Doppler ultrasound).
- Initiate anticoagulation (LMWH) if DVT is confirmed.

19. A woman was given emergency contraceptive complaint of vomiting 4 hours after taking the (pills). She turns back in the evening with the pills. What is the single most appropriate initial step regarding contraception?

A. 4 COC pills stat

B. Injection Progesterone

C. Insert IUCD

D. Reassurance

E. Repeat dose of EC

RESOURCE

d. According to NICE guidelines, if a woman vomits within 3 hours of taking emergency contraception (EC), she should repeat the dose. However, in this case, vomiting occurred 4 hours later, meaning the medication is likely absorbed.

20. A 22 years old female married for 2 years has a 1 year old daughter who is on formula feed. She seeks your advice for contraception, the best option would be:

A. COC

B. Condoms

C. IUCD

D. Natural methods

E. POP

a. COCs (Combined Oral Contraceptive Pills) can be used after 6 weeks postpartum but are avoided earlier due to increased VTE risk. POP (Progestogen-Only Pill) is safe immediately postpartum and does not affect milk supply.

21. A 30 years old female having 3 children, all SVDs always been in a stable relationship with no history of pelvic infections, asking for long term contraception. Which is the best method for her?

A. COC

B. Condoms

C. Injectable progestogen

D. IUCD

E. Natural methods

d. According to NICE guidelines, the best long-term contraception for a 30-year-old multiparous woman (3 children, all SVDs), in a stable relationship with no history of pelvic infections is an IUCD (Copper or Levonorgestrel IUS) due to its long duration of action (5–10 years), reversibility, and high efficacy. Injectable progestogen is also long-acting but may cause irregular bleeding and delayed return of fertility. COCs and condoms are less effective in long-term contraception, while natural methods are unreliable.

22. You are investigating an infertile female. Her serum progesterone on day 21 comes out to be < 16 nmol/ l. What is the most appropriate advice for her?

A. Immediately repeat the test

B. Reassurance

C. Refer to Gynecologist.

D. Repeat test in another cycle

E. Start Tab clomiphene

d. According to NICE guidelines, a serum progesterone level measured 7 days before the expected menstruation (e.g., day 21 of a 28-day cycle) is used to assess ovulation. A level above 30 nmol/L is consistent with ovulation. If the level is below 30 nmol/L, it is recommended to repeat the test in another cycle to confirm anovulation before considering further investigations or treatments. https://gpnotebook.com/pages/gynaecology/progesterone-ovulatory-test

23. A 55 years post-menopausal female who is taking HRT (Combined progestogen) comes to you with history of post estrogen coital bleeding during a holiday abroad. She attributes this to her carelessness because she forgot to take her hormones on more than one occasion.

What is the single most appropriate initial step?

A. Estrogen pessaries

B. Increase HRT dose

C. Oral Transamine

D. Pap smear

E. Reassurance

d. According to NICE guidelines, postmenopausal bleeding (PMB) should always be investigated as it could indicate endometrial pathology, including endometrial cancer. First-line initial step is a Pap smear (option D), followed by TVUS if needed. If the endometrial thickness is ≥4mm, further evaluation with endometrial biopsy or hysteroscopy is warranted. Since the patient reports post-coital bleeding while on HRT, cervical causes (such as cervical cancer or atrophy) should also be ruled out.

24. A 26 years old married female presents with painful lump in her vagina. On examination hot, red labium is seen. Which of the following aerobes is most commonly isolated from such lump?

A. Escherichia coli

B. Neisseria gonorrhoeae

C. Pseudomonas aeruginosa

D. Staphylococcus aureus

E. Streptococcus faecalis

b. According to Oxford Handbook of general practice Gonorrhea presentation in women may be asymptomatic (50%) or cause vaginal discharge (50%), lower abdominal pain; dysuria but not frequency (25%); abnormal vaginal bleeding; PID; abscess of Bartholin's gland; miscarriage; or preterm labour. Rectal and pharyngeal infections are usually asymptomatic.

25. A 26 years old married woman presents with pain in vulva since last 6 months. There is no itching, vaginal discharge or fever. Examination of vulva and vagina is normal. Her Pap smear and ultrasound are also normal.

Which one of the following is found to be most effective?

A. Oral Mefenamic acid

B. Topical corticosteroid cream

C. Topical Diclofenac gel

D. Topical estrogen cream

E. Tricyclic antidepressants

e. According to Oxford Handbook of general practice, treatment of Vulvodynia include:

- Topical: Avoid irritants, e.g. bubble bath— use soap substitute (e.g. aqueous cream) and topical moisturizer. Lidocaine gel/ cream 5% may control pain during intercourse (apply 10min before)

- Oral: Amitriptyline (10– 75mg)— start with low dose and titrate slowly; if ineffective/ side effects, consider gabapentin/ pregabalin
- Refer: If causing significant distress and not responding to treatment

26. A 56 years old postmenopausal female presents with dyspareunia. Which of the following medications may prevent or reverse her problem?

A. Clomiphene

B. Danazol

C. Estrogen

D. Medroxyprogesterone

E. Norethindrone

c. Postmenopausal dyspareunia is often caused by vaginal atrophy due to decreased estrogen levels. NICE guidelines recommend vaginal estrogen therapy as the most effective treatment to prevent or reverse symptoms of vaginal dryness and atrophy. It helps restore vaginal elasticity and lubrication, improving symptoms and reducing discomfort during intercourse.

27. A 25 years old pregnant female complains of vulval discomfort and itching for many days. On examination, skin colored papules resembling cauliflower are seen on vulva.

What is the most appropriate treatment?

A. Topical Salicylic acid

B. Topical Acyclovir

C. Topical Podophyllin

D. Electric Cauterization

E. Cryotherapy

e. In pregnancy, vulval warts (condylomata acuminata) caused by HPV are commonly treated with cryotherapy or other physical ablation methods such as surgical excision if necessary. Topical treatments like podophyllin are contraindicated during pregnancy due to potential teratogenic effects. Cryotherapy is safe and effective in reducing the size and discomfort of the warts.

28. A 14 year old female comes to your office with a 6-month history of lower mid abdominal pain. The pain is colicky in nature, radiates to the back and upper thighs, begins with onset of menses, and lasts for 2-4 days. She has missed several days of school during the last 2 months because the pain was so severe. The patient is not sexually active. Physical examination, including abdomen and pelvis, is normal. What is the most likely etiology of this patient's pain?

A. Primary dysmenorrhea

B. Pelvic inflammatory disease (PID)

C. Secondary dysmenorrhea

D. Metromenorrhagia

E. Premenstrual syndrome

a. Premenstrual syndrome (PMS) is characterized by physical, emotional, and behavioral symptoms that occur in the luteal phase (1-2 weeks before menstruation) and resolve shortly after the onset of menses. Common symptoms include mood swings, irritability, bloating, and breast tenderness, but PMS does not typically cause severe colicky lower abdominal pain starting with menses as described in this case.

In contrast, primary dysmenorrhea specifically involves menstrual pain that begins with or just before the onset of menstruation and subsides within 2-4 days, making it a better fit for the patient's symptoms. The key differentiator here is the timing and nature of the pain, which aligns more with dysmenorrhea rather than PMS.

29. A 30 years old female presents with dysmenorrhea, dyspareunia and infertility. Pelvic examination reveals fixed, nodular, retroverted uterus. A transvaginal ultrasound confirms a mass in the adnexa. Which of the following medical treatments is appropriate for this condition?

A. COC pills

B. IM medroxyprogesterone acetate

C. IM Methotrexate

D. IV Estrogen

E. Progestin only pills

a. The most likely diagnosis is endometriosis, given the symptoms of dysmenorrhea, dyspareunia, infertility, and a fixed, nodular, retroverted uterus with adnexal masses seen on ultrasound. Combined oral contraceptive (COC) pills are an effective medical treatment for managing pain and suppressing endometriosis progression by reducing ovulation and endometrial tissue stimulation. Other options like progestins (e.g., medroxyprogesterone) can also be considered but are less commonly used as a first-line option compared to COCs. Methotrexate and estrogen are not appropriate treatments for endometriosis.

30. A 15 years old has tried different NSAIDS for her primary dysmenorrhea. She had partial relief of her pain and she still misses school frequently

What will be the next appropriate step?

A. COC pills

B. Danazol

C. Increase NSAIDS

D. Laparoscopy

E. Spironolactone

a. For a 15-year-old with primary dysmenorrhea not fully relieved by NSAIDs, the next step is to try combined oral contraceptive (COC) pills. COCs work by suppressing ovulation and reducing prostaglandin production, alleviating the symptoms of dysmenorrhea. Laparoscopy is reserved for cases with suspected secondary causes (e.g., endometriosis), and options like danazol are not first-line treatments due to side effects. Increasing NSAIDs may not provide additional relief if partial efficacy has already been achieved.

31. A 21 years old healthy primigravida has come for routine antenatal check up. Her urinalysis show:

Sp gravity: 1.015

Nitrite: positive

Proteins: nil

Wbc: 7-8 phf

Rbc: nil

Epith cells: 1-2

You should advise her:

A. Observe for urinary symptoms

B. Repeat urinalysis after 4 weeks

C. Send 24 hours urine sample

D. Start antibiotics for one week

E. Wait for urine culture results

d. Routine screening with MSU for UTI is offered at booking. 2–5% of pregnant women have asymptomatic bacteriuria, defined as pure growth of >105 organisms/mL—1 in 3 will develop symptomatic infection (acute cystitis, pyelonephritis) if left untreated. Both untreated bacteriuria and frank UTI are associated with preterm delivery and IUGR. Treat for at least 1wk with suitable antibiotic (avoid trimethoprim in first trimester). Check MSU following treatment to ensure infection has cleared.

32. A 37 years old pregnant woman is advised amniocentesis by her gynecologist. She had an abnormal child 3 years ago. She is concerned about the procedure and asks you about the risks of miscarriage with amniocentesis.

What should be the single most appropriate response?

A. 1%

B. 2%

C. 3%

D. 4%

E. 5%

b. Sampling of amniotic fluid via transabdominal needle under USS guidance >15wk gestation. 1.9% risk of pregnancy loss. OHGP 5th Ed Page 783

33. A 23 years old asthmatic woman presents for management of asthma at 18 weeks of gestation. She is taking Beclomethasone inhaler 400 micrograms twice a day and inhaler salbutamol needed.

What should be the single most appropriate step in management?

A. Continue same treatment

B. Discontinue Beclomethasone

C. Discontinue salbutamol inhaler

D. Increase Beclomethasone

E. Increase salbutamol inhaler

a. Affects ~5% of pregnant women. Generally, improves with pregnancy, especially into the third trimester. In most cases, treat asthma as usual—most drugs commonly used for treatment of asthma are safe in pregnancy. OHGP 5th Ed Page 800

34. A 28 years old woman is taking Methotrexate for her Rheumatoid Arthritis. Her symptoms are well controlled. She recently got married and plans to conceive.

What should be the single most appropriate step?

A. Change to Azathioprine

B. Change to Leflunomide

C. Change to Penicillamine

D. Change to Sulfasalazine

E. Continue Methotrexate

d. Disease-modifying drugs:

- Sulfasalazine—folic acid supplementation is recommended
- Azathioprine—associated with IUGR
- Penicillamine—may weaken fetal collagen
- Methotrexate and most biological agents are contraindicated

35. A 34 years old known patient of depression comes after delivery. She wants to breast feed her baby. Which of the following is most appropriate choice for her?

A. Citalopram

B. Fluoxetene

C. Fluvoxamine

D. Paroxetine

E. Sertraline

e. Sertraline is safe in pregnancy and breastfeeding.

36. An 18 years old primigravida was found to have HB% 10 gm/dl on routine antenatal screening and was given tab. Ferrous Sulphate 200 mg O.D and tab. Folic Acid 5mg O.D. After 4 weeks her HB% is still unchanged. What is the most appropriate next step?

A. Exclude Urinary Tract infection

B. Hemoglobin electrophoresis

C. Increase dose of Ferrous Sulphate

D. Increase the dose of Folic Acid

E. Referral for Parenteral Iron

37. A 25 years old pregnant woman comes to you for her 1st antenatal visit. Her previous 4.7 kg at child weighed at birth. What is the most appropriate step?

A. Fasting blood sugar

B. GTT at 12 weeks

C. GTT at 1st visit

D. GTT at 28 weeks

E. Urine for sugar

d. Offer an OGTT at 24–28wk if:

- Previous macrosomic baby (≥4.5kg)
- DM in a first-degree relative

- Family origin associated with high prevalence of DM: South Asian (especially India, Pakistan, or Bangladesh); black Caribbean; Middle Eastern (especially Saudi Arabia, United Arab Emirates, Iraq, Jordan, Syria, Oman, Qatar, Kuwait, Lebanon, or Egypt)
- BMI >30kg/m2.

offer a 2h 75g oral glucose tolerance test (OGTT) at 16–18wk, followed by a repeat OGTT at 28wk if the first test is normal if:

- Previous gestational DM or PCOS. OHGP 5th Ed Page 786

38. A 19 years old Primigravida at 30 weeks of gestation presents with headache and swelling in feet. Her pulse is 80/min, B.P is 140/90 mm of Hg and her urine albumin is positive. What is the most appropriate step?

A. Admit in hospital

B. B.P monitoring at home

C. Refer to Gynecologist

D. Salt restriction and Furosemide

E. Start Methyldopa

a. New hypertension with proteinuria >20wk gestation:

- Immediate admission if Diastolic BP ≥90mmHg and new proteinuria ≥1+ on dipstick and significant symptoms (Epigastric pain, Vomiting, Headache, Visual disturbance↓ fetal movements, Small for gestational age fetus). OHGP 5th Ed Page 805

39. A 26 years old pregnant woman is found positive for Hepatitis C during routine antenatal visit at 8 weeks of gestation. Her SGPT is 75 IU. What is the most appropriate step?

A. Give immunoglobulin to baby at delivery

B. Recommend not to breast feed

C. Screen baby at 12 months

D. Start Interferon injections

E. Termination of Pregnancy

c. Hepatitis C - Prevalence in pregnant women is 0.14–0.8%. Except when initial infection of the mother occurs during pregnancy (when transfer rate is much higher), transmission rate to the fetus is ~5%. To date there is no evidence that HCV can be transferred to the child by breastfeeding. Infants at risk can be screened for HCV infection at 12mo (RNA screen) or 18–24mo (HCV antibody test). The majority of infants that acquire HCV infection via their mothers develop chronic hepatitis. Treatment is with interferon and achieves viral clearance rates of 40%. OHGP 5th Ed Page 797

40. A 22 years old pregnant woman at 9 weeks of gestation presents with profuse offensive vaginal discharge. The wet preparation reveals clue cells.

What is the most appropriate option?

A. Clindamycin vaginal Pessaries

B. Clotrimazole vaginal Pessaries

C. Metronidazole vaginal Pessaries

D. Oral Cap Tetracycline

E. Oral Tab Metronidazole

e. Present in ~10% of pregnant women—asymptomatic in half. Associated with ↑ preterm birth (×2). There is no screening policy in the UK, but, if detected:

Treat with metronidazole PO—400mg bd for 7d or 2g stat

41. A 24 years old woman comes to you at 12 weeks of gestation and is found to be positive for hepatitis B s antigen.

What is the most appropriate option?

A. Elective Cesarean Section

B. Immunoglobulin to mother during pregnancy

C. Immunoglobulin and vaccination to baby at birth

D. Pegylated Interferon injections for mother

E. Vaccinate the baby soon after delivery

c. Give hepatitis B vaccine as soon as possible (<24h) after birth to babies born to carrier mothers with the addition of immunoglobulin (HBIG) if the mother carries the hepatitis B e-antigen or had acute HBV infection during pregnancy. 85–95% effective in preventing neonatal hepatitis B infection. Further doses of vaccine are required at 1mo of age. The infant should then have 3 doses of hepatitis B vaccination as part of the routine childhood immunization schedule at 2mo, 3mo, and 4mo of age, and a booster dose at 1y at the same time as follow-up testing. OHGP 5th Ed Page 797

42. A 20 years old woman presents to you at 24 weeks of gestation, her 4 years old child chicken pox 15 days back and now she has developed vesicular rash on her trunk since morning.

What is the most appropriate option?

A. Immunoglobulin and Acyclovir

B. Immunoglobulin injections

C. No intervention required

D. Oral Acyclovir tablets

E. Termination of pregnancy

d. According to the Royal College of Obstetricians and Gynaecologists (RCOG) guidelines, pregnant women who develop chickenpox should be treated with oral acyclovir if they present within 24 hours of the onset of the rash and are beyond 20 weeks of gestation. The recommended dosage is 800 mg five times daily for seven days. This treatment aims to reduce the duration and severity of maternal symptoms. Varicella-zoster immunoglobulin (VZIG) is intended for post-exposure prophylaxis and is not beneficial once the rash has developed. https://www.rcog.org.uk/media/y3ajgkda/gtg13.pdf?

43. A 23 years old HIV positive female comes to you for her first antenatal visit. Her viral load is 50,000 and CD4 count is < 300 cells/mm3. When will you start antiretroviral therapy?

A. 12 weeks after delivery

B. After 14 weeks of gestation

C. After 28 weeks of gestation

D. At the time of delivery

E. Start treatment Immediately

e. Avoidance of breastfeeding, antiretroviral therapy, and appropriate management of delivery ↓ risk of transmission to <1%. A detailed fetal anomaly scan is important if there is first-trimester exposure to antiviral treatment (including folate antagonists) as possible ↑ risk of congenital abnormality. OHGP 5th Ed Page 797

44. A 28 years old woman, G3P2, comes to you at 30 weeks of gestation with mild vaginal bleeding.

What is the single most appropriate step?

A. Abdominal Ultrasound

B. Reassure the patient

C. Send for Culdoscopy

D. Transvaginal ultrasound

E. Vaginal examination

a. Abdominal Ultrasound – to rule out placenta previa

45. A 32 years old, G3P2, delivered a healthy baby girl 2 days back. She complains of vaginal bleeding which is more than her previous two deliveries. Her pulse is 88 BPM, BP is 110/70 mm Hg, OS is closed, uterus is contracted and non-tender. What is the single most appropriate step?

A. Calcium Gluconate

B. Inj Transamine

C. Inj. Ergometrine

D. Reassurance

E. Uterine evacuation

E. Secondary PPH - Excessive blood loss PV >24h after delivery. Peak incidence: 5–12d after delivery. In this case patient is vitally stable, no signs of fever and OS is closed, so reassure the patient.

46. A 36 years old G4P3, is advised amniocentesis at 19 weeks of gestation. Her Blood group is A negative and she was given anti rhesus immunoglobulin two days after her previous delivery. What is the most recommended according to NICE guidelines.

A. Anti-D 250 IU right now

B. Anti-D 500 IU at 28 weeks

C. Anti-D 500 IU at delivery only

D. Anti-D 500 IU right now

E. Check antibodies at 28 weeks

a. When should anti-D be administered?:

<20wk—250IU; ≥20wk—500IU + test size of FMH. Following sensitizing events before delivery

All non-sensitized RhD –ve women after:

- Invasive prenatal diagnosis (amniocentesis, chorionic villus sampling, fetal blood sampling) or other intrauterine procedures
- Antepartum haemorrhage
- External cephalic version of the fetus

- Closed abdominal injury (e.g. RTA)
- Intrauterine death. OHGP 5th Ed Page 771

47. A 29-year-old gravida 5, para 4 at 36 weeks of gestation presents with backache which is localized, dull and constant. Pain aggravates with walking and bending and relieved by rest.

What is the management of choice for this patient's condition?

A. Acetaminophen and codeine

B. Complete bed rest till delivery

C. Physiotherapy and Acetaminophen

D. Reassurance

E. Referral to orthopedic surgeon

c. Physiotherapy and Acetaminophen, codeine causes constipation.

48. A 20 years old primigravida comes for routine antenatal visit. She has a pet cat, you advise her to avoid contact with cat litter because of the risk of developing:

A. Coccidiomycosis

B. Cryptococcus

C. Cytomegalovirus

D. Epstein bar virus

E. Toxoplasmosis

e. Advice for prevention of toxoplasmosis and listeriosis

- Only eat well-cooked meat
- Wash hands, cooking utensils, and food surfaces after preparing raw meat
- Keep raw meat and cooked foods on separate plates
- Wash all soil from fruit and vegetables before eating
- If possible avoid cleaning cat litter (or use gloves and wash hands after)
- Use gloves when gardening and wash hands afterwards. OHGP 5th Ed Page 798

49. A 22 years old woman presents with abdominal pain and mild vaginal bleeding. Her LMP was 6 weeks back. What is the single most appropriate initial test?

A. Culdocentesis

B. Hysterosalpingogram

C. Serum beta-HCG

D. Transabdominal ultrasound

E. Transvaginal ultrasound

c. Ectopic Pregnancy - Symptoms include:

- Unilateral lower abdominal or pelvic pain
- Vaginal bleeding
- If ruptured, can be hypotensive with peritoneal irritation

Diagnostic testing includes beta-hCG to confirm the presence of a pregnancy and U/S to locate the site of implantation of the ectopic pregnancy. Master the Boards 11th Ed

50. A pregnant woman at 18 weeks of gestation presents for routine antenatal check up. She has been prescribed folic acid by another doctor last week. What is the reason for starting folic acid after at this gestational age?

A. To prevent abortion

B. To prevent fetal growth retardation

C. To prevent mouth ulcer

D. To prevent neural tube defects

E. To treat anemia

e. Folic acid - ↓ risk of neural tube defects. Take folic acid supplements (400 micrograms) every day from stopping contraception until 13wk pregnant. After 13 weeks it is administered most likely to treat anemia.

51. A 37-years old pregnant, office secretary, at 30 weeks of gestation, comes to you with severe vulvar and lower-extremity varicosities for the last four weeks. The varicosities are unsightly and cause severe pain, especially as the day goes What would you recommend at this time for the patient according to NICE guidelines?

A. Discontinue work duties till delivery

B. Inject sclerosing agents in most severe veins

C. Elevate her legs and wear support stockings.

D. Furosemide in low doses till delivery

E. Nothing is required at this time

c. Vericose Veins - Cause aching legs, fatigue, itch, and ankle/foot swelling. If ankles are swollen, exclude pre-eclampsia (check BP, dipstick urine for proteinuria). Elevate legs when sitting, provide support stockings, and encourage walking/discourage standing still. Complications include thrombophlebitis—treat with ice packs, elevation, support stockings, and analgesia—and DVT. OHGP 5th Ed Page 789

52. A 21 years old female has an irregular menstrual cycle. Her pregnancy test is positive but she is unsure of dates.

What is the most appropriate time of ultrasound for fetal gestational age?

A. 10 weeks

B. 16 weeks

C. 20 weeks

D. 24 weeks

E. 28 weeks

a. Offer early USS at 10wk–13wk 6d for dating purposes and to detect multiple pregnancy. Offer routine anomaly scan at 18wk–20wk 6d gestation. If the placenta extends across the internal cervical os, arrange repeat USS at 32wk. OHGP 5th Ed Page 774

53. A 24 years old primigravida at 30 weeks of gestation presents with vaginal discharge. Her HVS reveals Chlamydia trachomatis infection. The drug of choice for her treatment would be?

A. Cephazolin

B. Clindamycin

C. Erythromycin

D. Metronidazole

E. Tetracycline

e. Chalamydia in pregnancy is treated with erthyromycin.

54. A 24 years old Primigravida at 36 weeks of gestation presents with sudden onset of sharp continuous abdominal pain since last 2 hours. Her pulse is 110 BPM and BP is 90/50 mm Hg. Her uterus is tense. What is the most likely diagnosis?

A. Amniotic fluid embolus

B. Placental abruption

C. Red degeneration of a fibroid

D. Rupture of the uterus

E. Twisted ovarian cyst

b. Placental abruption (abruptio placentae) - Part of the placenta becomes detached from the uterus. Consequences depend on the degree of separation and the amount of blood loss. Typically presents with constant pain—may be felt in the back if posterior placenta. The uterus is tender and feels woody hard. Often accompanied by shock ± PV bleeding, and absent fetal heart or signs of fetal distress (fetal tachycardia/bradycardia). If suspected, admit as an acute emergency to a specialist obstetric unit. OHGP 5th Ed Page 1085

55. A woman had a baby with an open neural tube defect. There is no family history of this condition. What is the risk of having neural tube defect in subsequent pregnancies without Folic acid therapy?

A. 15-20% chance of recurrence

B. No increased risk of recurrence

C. 2-5% chance of recurrence

D. 8-10 % chance of recurrence

E. 10-15% chance of recurrence

c. According to NICE and RCOG guidelines, a woman with a previous pregnancy affected by a neural tube defect has a 2-5% risk of recurrence in subsequent pregnancies. This risk is higher than the general population (~0.1-0.2%) but can be significantly reduced with high-dose folic acid (5 mg daily) preconceptionally and during the first trimester.

56. A 23 yrs old primigravida at 10 weeks of gestation presents with vaginal bleeding. Her temp is 98.6 ˚F, pulse 80/min BP 120/80 mm Hg.

What should be the initial diagnostic step?

A. Amniocentesis

B. Hysteroscopy

C. Serum Beta HCG level

D. Transabdominal ultrasound

E. Transvaginal ultrasound

e. In early pregnancy bleeding, transvaginal ultrasound (TVUS) is the first-line investigation as it provides the most accurate assessment of fetal viability, location, and presence of complications such as miscarriage or ectopic pregnancy. Transabdominal ultrasound is less sensitive in early gestation. Serum Beta hCG is useful but not the primary investigation unless ectopic pregnancy is suspected with inconclusive ultrasound findings.

57. A 25 yrs old G2P1 at 8 weeks of gestation presents with lower abdominal pain, vaginal bleeding and is found to have *dilated cervix* with no cervical polyp. Her temp is 98.6 ˚F, Pulse is 86/min, BP is 110/70 mm Hg. Ultrasound shows fetal cardiac activity. What is the most likely diagnosis?

A. Incomplete Abortion

B. Inevitable Abortion

C. Missed Abortion

D. Septic Abortion

E. Threatened Abortion

e. Threatened Abortion - where the products of conception remain intact, there is vaginal bleeding, but no cervical dilation is present. The recommended management in such cases includes pelvic rest, which means avoiding intercourse, heavy lifting, and strenuous activities to reduce the risk of progression to pregnancy loss. Regular follow-up with ultrasound and monitoring of symptoms is advised to assess fetal viability and ensure maternal well-being.

58. A 26 Yrs old female presents to you with irritability, low mood and bursts of crying three days after giving birth to a healthy baby girl. Mother is holding the baby affectionately and both mother and baby look neat & tidy. What is the most likely diagnosis?

A. Postnatal anxiety

B. Postnatal Blues

C. Postnatal depression

D. Postnatal Psychosis

E. Postnatal stress syndrome

b. Very common—women become tearful and low within the first 10d of delivery. Be supportive. Usually resolves. OHGP 5th Ed Page 801

59. A 22 yrs old girl is brought to you by her relatives complaining that she was attempting to strangulate her three weeks old baby boy. Baby appears malnourished and stinks examination. Mother admits that she *hates* her baby.

What should be the most appropriate initial step in management of this woman?

A. Admission

B. Counseling

C. Fluoxetine

D. Lithium

E. Tryptonal

a. Puerperal psychosis - Suspect if severe depression; high suicidal drive; mania; psychotic symptoms. In all cases seek expert help from a psychiatrist. Consider admission—under a Section if necessary. Risk of recurrence is 20%—but 50% will never be mentally ill again.

Refer to the perinatal mental health team immediately if any risk of self-harm, suicide, or harm to the baby. OHGP 5th Ed Page 801

60. A 37 year old nulliparous female comes your office with a 3-day history of progressive pelvic pain, vaginal spotting but no frank bleeding. She is afebrile, and her pulse and blood pressure are normal Ultrasound shows an empty uterus and a 15 sac without fetal cardiac activity. Serum B HCG is 1500 IU, what is the most appropriate treatment?

A. Ampicillin, Gentamycin, Metronidazole

B. IV Ringer's lactate

C. Laparoscopy

D. laparotomy

E. Methotrexate

e. The medical management of choice for ectopic pregnancy is intramuscular methotrexate, a folic acid antagonist that destroys rapidly growing cytotrophoblastic tissue. A single dose resolves 90% of cases, with success indicated by a 15% decline in serum β-hCG levels within 4-7 days. Failure to meet this threshold necessitates an additional dose or surgery. The cumulative success rate is 95%, with tubal patency maintained in 80% and fertility preserved in 70%. Methotrexate is optimal for

- Small (<3.5 cm)
- Unruptured ectopic pregnancies
- Early gestation (<8 weeks)
- Future fertility desired
- Nonlaparoscopic diagnosis
- Hemodynamic stability without hemoperitoneum
- Normal lab parameters (hemoglobin, liver, renal function)
- The ability to attend follow-up care.

These success rates are comparable to salpingostomy for unruptured tubal ectopic pregnancies.Swanson Family Medicinr Review 9th Ed Pg - 395

61. A 36 yrs old G3P2 presents to you at 11 weeks of gestation for antenatal care. Her report show increased Beta HCG, decreased alpha fetoprotein and serum oestriol. What will be the confirmatory test for her?

A. Amniocentesis

B. Anomalies scan

C. Chorionic Villous Sampling

D. Nuchal thickness

E. Quadruple test

c. CVS is the confirmatory test for chromosomal abnormalities like Down syndrome (Trisomy 21) when screening results show increased β-hCG, decreased AFP, and decreased estriol. It is performed between 10–13 weeks of gestation, making it the preferred option in this case at 11 weeks. Amniocentesis is another confirmatory test but is done later, typically after 15 weeks.

FREE SOURCE

MUSCULOSKELETAL

1. A 57 years old overweight woman has been experiencing progressively worsening pain in both knees over the past couple of years. The pain gets worse towards the end of day. What is the most likely diagnosis?

A. Gout

B. Osgood Schlatter disease

C. Osteoarthritis

D. Pseudogout

E. Rheumatoid arthritis

c. Osteoarthritis - Joint pain ± stiffness, synovial thickening, deformity, effusion, crepitus, muscle weakness/wasting, and ↓ function. Most commonly affects hip, knee, and base of thumb. Typically exacerbations last weeks to months. Nodal OA, with swelling of the distal interphalangeal joints (Heberden's nodes) has a familial tendency. OHGP 5th Ed Page 486

2. A 65 years old woman presents with a history of several months of increasing pain on her left first carpo-metacarpal joint after day's gardening. Examination reveals some swelling and tenderness of joint as well as swelling over her distal interphalangeal joint. What would be the most likely drug of choice for her problem?

A. Colchicine

B. Diclofenac

C. Methotrexate

D. Paracetamol

E. Tizanidine

d. Regular paracetamol (1g qds) is first-line drug treatment for all OA and/or topical NSAIDs for knee/hand OA only. Topical NSAIDs have less side effects than oral NSAIDs and are more acceptable to patients. OHGP 5th Ed Page 487

3. A 30 years old man presents with a 1-week history of bilateral knee swelling. He has lower back pain for several months and has been getting abdominal cramps and opening his bowels up to 10 times a day for the past 6 weeks. What would be the most likely diagnosis?

A. Enteropathic arthritis

B. Re-active arthritis

C. Reiter's syndrome

D. Rheumatoid arthritis

E. Septic arthritis

a. Enteropathic spondyloarthropathy - Oligoarticular or polyarticular arthritis linked to inflammatory bowel disease. Presentation is variable and includes: sacroiliitis, plantar fasciitis, inflammatory spinal pains, and other enthesitides (insertional ligament/tendon inflammation). Arthritis may evolve and relapse/remit independently of bowel disease. Management: NSAIDs may help joint pain but aggravate bowel disease. Refer to rheumatology for confirmation of diagnosis and advice on management and disease-modifying drugs. OHGP 5th Ed Page 493

4. A 48 years old woman is concerned that she may develop osteoporosis, as her mother got fracture of hip joint when she was of 60 years. Patient BMI is 15 KG/M2. She is still menstruating regularly. What would be the most appropriate next step in the diagnosis of osteoporosis?

A. Bone Mineral Density

B. Serum Alkaline phosphatase

C. Serum Calcium

D. Serum Vit. D level

E. X-ray hip for osteopenia

a. The National Osteoporosis Foundation (NOF) recommends that all women aged 65 years or older be screened for osteoporosis, regardless of risk factors. The NOF also advises screening younger postmenopausal women who have one or more major risk factors, such as a personal history of a traumatic fracture, a family history of osteoporotic fracture, smoking, or a body weight below 127 lb. Likewise, the U.S. Preventive Services Task Force (USPSTF) recommends universal bone mineral density screening for women aged 65 years or older and for women aged 60 years or older who present with risk factors for osteoporotic fracture. However, the USPSTF makes no specific recommendation for or against routine screening in postmenopausal women younger than 60 years or in those aged 60 to 64 years who lack increased risk factors for osteoporotic fracture. Swansons Family Medicine Review 9th Ed Pg 381

5. An 85 years old nursing home resident's daughter is concerned that her mother may sustain a hip fracture as she has heard about. the high morbidity and mortality associated with hip fractures in the elderly. She had menopause at 53 years of age and is lifelong non-smoker. What would be the most appropriate treatment of choice?

A. Alendronate

B. Calcitonin

C. Calcium & Vit. D

D. Low dose HRT

E. Raloxifen

a. First-line treatment options for prevention and treatment of osteoporosis include the bisphosphonates, such as alendronate, risedronate, and ibandronate, and zoledronic acid. Bisphosphonates work by inhibiting osteoclastic activity as well as binding to hydroxyapatite to decrease bone resorption. All FDA-approved bisphosphonates significantly reduce the incidence of vertebral fractures. Both alendronate and risedronate have also been shown to reduce the risk of hip fractures by 30% to 50% in patients with established osteoporosis. Because a minority of patients may suffer from erosive esophagitis, the patient should be advised to take bisphosphonates with 8 oz of water upon awakening, remain upright, and avoid food for 30 minutes afterwards. Swansons Family Medicine Review 9th Ed Pg 353

6. A 63 years old woman fractured her hip when she rolled out of bed onto a carpeted floor. She has had the hip fixed and is awaiting bone scan. What would be the appropriate treatment of choice?

A. Alendronate

B. Raloxifen

C. Inj Vit D3

D. HRT

E. Calcitonin

a. First-line treatment options for prevention and treatment of osteoporosis include the bisphosphonates, such as alendronate, risedronate, and ibandronate, and zoledronic acid. Bisphosphonates work by inhibiting osteoclastic activity as well as binding to hydroxyapatite to decrease bone resorption. All FDA-approved bisphosphonates significantly reduce the incidence of vertebral fractures. Both alendronate and risedronate have also been shown to reduce the risk of hip fractures by 30% to 50% in patients with established osteoporosis. Because a minority of patients may suffer from erosive esophagitis, the patient should be advised to take bisphosphonates with 8 oz of water upon awakening, remain upright, and avoid food for 30 minutes afterwards. Swansons Medicine Review 9th Ed Pg 353

7. A 39 years old female asthmatic patient is taking oral steroids daily for last 4 months. She is worried about the osteoporosis. What would be the most appropriate step?

A. Measure Alkaline phosphatase

B. Measure Bone Mineral Density

C. Measure serum Ca

D. Start Alendronate

E. Start low dose HRT

b. Central DEXA is the gold standard for assessing bone mineral density (BMD). This procedure uses two beams of different energy directed at the patient, measuring the difference in absorption rates to quantify bone mineral content. BMD is computed at multiple sites, including the lumbar spine (L1-L4), femoral neck, and total proximal femur (hip). Ward's triangle, a computer-generated area with the lowest BMD in the femoral head, should not be used for diagnosing osteoporosis. At least two different sites, preferably the spine and hip, should be measured. Among all measurements, total hip BMD is the best predictor of future hip fractures. Swansons Medicine Review 9th Ed Pg 351

8. A 67 years old female asthmatic patient is taking 1600 µg per day inhaled Beclomethasone from last 4 months. He is worried about the side effects of steroids. She is already taking oral Vit D and calcium regularly. What drug will you advise her to protect him from the side effects of steroids?

A. Alendronate

B. Raloxifen

C. Inj Vit D3

D. HRT

E. Calcitonin

a. Steroid use is a risk factor for osteoporosis. Minimize steroid dose. For patients taking oral/high-dose inhaled steroids for >3mo or frequent courses of steroids, in addition:

- Add bone protection agent (e.g. bisphosphonate) for patients >65y or with history of fragility fracture or
- Refer patients <65y without history of fragility fracture for DXA scan and add a bone protection agent if T score is ≤−1.5

FREE SOURCE

9. A 67 years old man presents with painful knees since five years. Pain is worse at the end of day. His weight is 85 KG. What would be the best exercise for him?

A. Cycling

B. Hiking

C. Running

D. Swimming

E. Walking

e. Exercise and improving muscle strength - ↓ pain and disability, e.g. walking (for OA knee), swimming (for OAback and hip but may make neck worse), cycling (for OA hip and OA knee—but may worsen patellofemoral OA). Refer to physiotherapy for advice on exercises especially isometric exercises for the less mobile. OHGP 5th Ed Page 486

10. A 60 years old man presents with a history of several months of dull aching bone pains that is made worse by exercise. Examination shows bowing of tibia. His reports show increased alkaline phosphatase but normal calcium, Phosphate & PTH levels. What would be the diagnosis?

A. Myeloma

B. Osteomalacia

C. Osteomyelitis

D. Paget's disease

E. Osteoporosis

d. Paget's disease of bone - Pain—dull ache aggravated by weight bearing, often remains at rest; deformity—bowing of weight-bearing bones especially tibia (sabre), femur, and forearm—usually asymmetrical; frontal bossing of the forehead; distinctive changes on X-ray; ↑ bone-specific alk phos; normal Ca2+, PO4, and PTH. OHGP 5th Ed Page 478

11. A 25 years diabetic patient after surgery of femur bone presents with an infected wound for one month. He is unable to move his thigh. What would be the most likely organism responsible for his infected wound?

A. Gonococci

B. H. Influenza

C. Mycobacterium

D. Salmonella

E. Staphylococci

e. Osteomyelitis - Infection of bone. May spread from abscesses or follow surgery. Often no primary site is found. More common in those with DM, sickle cell disease, impaired immunity, and/or poor living standards. Organisms involved: **S. aureus**, streptococci, E. coli, Salmonella, Proteus, and Pseudomonas species, TB. Presents with pain, unwillingness to move affected part, warmth, effusions in neighbouring joints, fever, and malaise. Blood cultures are +ve in 60%; ↑ ESR/CRP; ↑ WCC. OHGP 5th Ed Page 478

12. A 43 years old Afghani woman presents with difficulty in rising form sitting position & general bone pains. Her reports show reduced Calcium & Phosphate and increased Alkaline Phosphatase. What would be the diagnosis?

A. Myeloma

B. Osteomalacia

C. Osteomyelitis

D. Osteoporosis

E. Paget's disease

b. Osteomalacia is characterized by defective bone mineralization, leading to bone pain, muscle weakness, and difficulty rising from a seated position. Biochemically, it presents with low calcium, low phosphate, and increased alkaline phosphatase due to defective bone turnover, often caused by vitamin D deficiency

BONE PROFILE INTERPRETATION

	Calcium	Phosphate	Alkaline Phosphatase (ALP)	Parathyroid Hormone (PTH)
Osteogenesis Imperfecta	Normal	Normal	Normal	Normal
Osteoporosis	Normal	Normal	Normal	Normal
Osteomalacia	↓	↓	↑	↑
Paget's Disease of Bone	Normal	Normal	↑ (Isolated raised ALP)	Normal
Primary Hyperparathyroidism	↑	↓	↑	↑
Secondary Hyperparathyroidism	↓	↑	↑	↑
Tertiary Hyperparathyroidism	↑	↑	↑	↑
Hypoparathyroidism	↓	↑	Normal	↓

13. A mother brings her 2 years old child with recurrent chest infections. His anterior fontanel is 1 cm and skull appears asymmetrical. His abdomen is protuberant. His reports show reduced Calcium Phosphate and increased Alkaline the most Phosphatase. What would be probable diagnosis?

A. Coeliac disease

B. Hyper parathyroidism

C. Hypothyroidism

D. Osteodystrophy

E. Rickets

e. Clinical features of rickets:

- Bone pain/tenderness: arms, legs, spine, pelvis
- Skeletal deformity: bow legs, pigeon chest (forward projection of the sternum), rachitic rosary (enlarged ends of ribs), **asymmetrical/odd-shaped skull** due to soft skull bones, spinal deformity (kyphosis, scoliosis), pelvic deformities
- Pathological fracture
- Dental deformities—delayed formation of teeth, holes in enamel, ↑ cavities
- Muscular problems—progressive weakness, ↓ muscle tone, muscle cramps
- Impaired growth ← short stature (can be permanent). OHGP 5th Ed Page 480

14. A 85 years old woman known patient of CRF presents with pain in her hip and muscle weakness for last 1 month. She is taking 1500 mg calcium daily. What would be the treatment to prevent bony complications?

A. Alendronate

B. Raloxifen

C. Vitamin D 800 units daily

D. 1, 25 Hydroxycholcalciferol

E. Calcitonin

d. In chronic renal failure (CRF), the kidneys fail to convert 25-hydroxyvitamin D into its active form, 1,25-dihydroxyvitamin D (calcitriol), leading to secondary hyperparathyroidism, osteomalacia, and renal osteodystrophy. Supplementing with calcitriol helps improve calcium absorption, suppresses parathyroid hormone (PTH) levels, and prevents bony complications. Alendronate and Raloxifene are not first-line in CRF due to altered bone metabolism, and calcitonin is mainly used for osteoporosis and hypercalcemia, not renal bone disease.

15. A mother brings reports of her 5 years old child which shows that there is a deficiency of an enzyme required. for metabolism of Vit D. What is the most likely diagnosis?

A. Age related deficiency

B. Dietary deficiency rickets

C. Hypophosphatemic rickets

D. Secondary rickets

E. Vit. D dependent rickets

e. Vitamin D-dependent rickets - Rare autosomal recessive inherited disorder resulting in an enzyme deficit in the metabolism of vitamin D. Refer for specialist care. Treated with vitamin D and Ca2+ supplements.

16. A 30 years old diabetic patient presents with pain and swelling in his right leg near tibial tubercle for the last one week. There is tenderness over medial side of tibia and he has fever of 101 F. He is able to move his leg. What would be the most sensitive test to diagnose his problem at this stage?

A. CRP

B. CT

C. ESR

D. MRI

E. X-RAY

d. Osteomyelitis - Infection of bone. May spread from abscesses or follow surgery. Often no primary site is found. More common in those with DM, sickle cell disease, impaired immunity, and/or poor living standards. Organisms involved: S. aureus, streptococci, E. coli, Salmonella, Proteus, and Pseudomonas species, TB. Presents with pain, unwillingness to move affected part, warmth, effusions in neighbouring joints, fever, and malaise. Blood cultures are +ve in 60%; ↑ ESR/CRP; ↑ WCC. Refer suspected cases for same-day orthopaedic opinion. Diagnosis is confirmed with imaging, e.g. MRI or bone scan (X-ray changes can take days to appear). Treatment: is with IV then PO antibiotics (≥6wk) and surgery to drain abscesses. Complications: septic arthritis, pathological fracture, deformity of growing bone, chronic infection. OHGP 5th Ed Page 478

17. A 55 years old office worker presents with painful swollen big right toe for last 2 days. He is having 1010 F. Morning stiffness is present. What would be the most specific test to diagnose this condition?

A. X-RAY

B. RA factor

C. Joint aspirate

D. ESR

E. Serum Uric acid

c. NICE guideline [NG219] states - Measure the serum urate level in people with symptoms and signs of gout to confirm the clinical diagnosis (serum urate level of 360 micromol/litre [6 mg/dl] or more). If serum urate level is below 360 micromol/litre (6 mg/dl) during a flare and gout is strongly suspected, repeat the serum urate level measurement at least 2 weeks after the flare has settled. **Consider joint aspiration and microscopy of synovial fluid if a diagnosis of gout remains uncertain** or unconfirmed. If joint aspiration cannot be carried out or the diagnosis of gout remains uncertain, consider imaging the affected joints with X-ray, ultrasound or dual-energy CT.

18. A 50 years old hypertensive, smoker patient comes with fever and pain in his foot and ankle for last one week. He is taking Aspirin Simvastatin atenolol, captopril and Hydrochlorthiazide. Which medicine is responsible for his problem?

A. Dispirin

B. Simvastatin

C. Atenolol

D. Captopril

E. Hydrochlorothiazide

e. Diuretics casue Hyperuricemia and thiazide are known for causing Gout.

19. A 35 years old patient comes for the third time with acute Gout. When will you start Allopurinol for prophylaxis after acute attack?

A. 1 week

B. 2 week

C. 3 week

D. 4 week

E. 5 week

d. NICE guideline [NG219] says - The treat-to-target strategy for gout management recommends starting with a low-dose urate-lowering therapy (ULT) and **using monthly serum urate** levels to guide dose increases until the target level is reached.

20. You start prophylactic medicine (allopurinol) for Gout in patient of recurrent attacks. You have checked serum urate level one month before. After how long you will recheck serum urate levels after starting the Allopurinol?

A. 1 month

B. 2 month

C. 3 month

D. 4 month

E. 5 month

a. d. NICE guideline [NG219] says - ULT should be initiated at least 2 to 4 weeks after a gout flare has settled, but if flares are frequent, it can be started during an active flare. The target serum urate level should be below 360 micromol/L (6 mg/dL), but for patients with tophaceous or chronic gouty arthritis or frequent flares despite reaching 360 micromol/L, a lower target of below 300 micromol/L (5 mg/dL) is recommended. Once the target urate level is achieved, annual monitoring is advised for those continuing ULT

21. A 50 years old patient presents with unilateral throbbing headache, facial pain & scalp tenderness while combing for last 1 week. What is the single most appropriate initial test to diagnose the condition?

A. Lumber puncture

B. X-ray skull

C. ESR

D. CT brain

E. MRI brain

c. A person may be regarded as having GCA if ≥3 of the following criteria are metG:

- Age ≥50y
- New headache—unilateral throbbing headache, facial pain, scalp tenderness, e.g. on brushing hair, and/or jaw claudication (↑ likelihood of visual symptoms)
- Temporal artery abnormality (tenderness, thickening, ↓pulsation)
- ↑ ESR >50mm/h (or ↑ CRP)
- Abnormal temporal artery biopsy compatible with GCA
- Visual symptoms (amaurosis fugax, diplopia, or sudden loss of vision) are early complications of GCA and may be the presenting feature.

22. A 65 years old female patient presents with malaise, low mood, pain and stiffness of shoulder & hip girdles for last 3 months. These symptoms are severe in the morning. BP & pulse are normal. What would be the most likely diagnosis?

A. Depression

B. Hypothyroidism

C. Polymyalgia Rheumatica

D. Polymyositis

E. Rheumatoid arthritis

c. Both PMR and GCA affect the elderly (rare <50y), Diagnosis is clinical. Both PMR and GCA may present with malaise, anorexia, fever, night sweats, weight ↓, and depression. Check ESR/CRP on presentation. A person may be regarded as having PMR if the following criteria are presentG:

- Age >50y; duration >2wk
- Bilateral shoulder or pelvic girdle aching, or both
- Morning stiffness duration of >45min
- Evidence of acute phase response, i.e. ↑ ESR (usually >30mm/h) or ↑ CRP). Diagnosis can be made without ↑inflammatory markers if classical clinical picture and rapid response to steroid treatment

23. A 65 years patient comes with lab reports showing ESR 70 mm of Hg. CPK, Uric acid and RA factor are normal. He is having scalp tenderness while combing & headache is throbbing in nature. What would be your next step to prevent him from further complications?

A. Carbamazepine

B. Ceftriaxone

C. Dicofenac

D. Prednisolone

E. Sumatriptan

d. Corticosteroids ↓ vascular complications, particularly blindness, and relieve symptoms (70% improvement in <1wk); prescribe prednisolone 40–60mg daily to start immediately a diagnosis of GCA is suspected. OHGP 5th Ed Page 499

24. A 20 years old boy presents with pain & swelling of right elbow and left knee joint for last 1 week. Two weeks ago he had diarrhea which has now settled. What would be the most likely diagnosis?

A. Enteropathic arthropathy

B. Pseudogout

C. Reactive arthritis

D. Reiter's syndrome

E. Rheumatoid arthritis

c. Reactive arthritis - Often asymmetrical aseptic arthritis in ≥1 joint. Occurs 2–6wk after bacterial infection elsewhere—e.g. gastroenteritis (Salmonella, Campylobacter), GU infection (Chlamydia, Gonorrhoea). ↑ incidence in HLA B27 +ve individuals. NSAIDs, physiotherapy, and steroid joint injections. Recovery usually occurs within months. A minority develop chronic arthritis requiring disease-modifying drugs. Refer to rheumatology. OHGP 5th Ed Page 493

25. A 30 years male presents with painful red eye, skin rash, burning micturition, backache and multiple joint pains for last 2 weeks. Three weeks ago he had diarrhea which has now settled. What would be most likely diagnosis?

A. Osteoarthritis

B. Re-Active Arthritis

C. Reiter's Syndrome

D. Rheumatoid Arthritis

E. SLE

c. Reiter's Syndrome - Polyarthropathy, urethritis, iritis, and a psoriasiform rash. Affects men with HLA B27 genotype. Commonly follows GU or bowel infection. Joint and eye changes are often severe. Refer for specialist management.

26. A 82 years old female presents with pain in her hips from last 2 month. 10 years ago she had a fracture of her wrist when she rolled out of her bed. Her diet is also not proper. Her BMI is 17KG/ M2. What would be your next step in management?

A. Calcium & Vitamin D

B. Calcium & Vit. D and Calcitonin

C. Urgent Dexa Scan for BMD

D. Alendronate and Inj Vit D

E. Calcium & Vit. D& Alendronate

e. Give Ca2+ and/or vitamin D supplements to postmenopausal women with dietary deficiency; also consider if on long-term steroids, >80y, housebound, or institutionalized, e.g. alendronic acid 70mg once weekly. ↓ bone loss and fracture rate. Mainstay of treatment for osteoporosis. Avoid if severe CKD or woman of child-bearing age (possible teratogenic effects).

27. A 67 years old female is very much worried that she may get fracture of hip joint because her mother also got fracture of hip joint at the age of 70 years. Her mother was very slim at that time. Patient BMI is 18kg/M2. What would be your next step in management?

A. Alendronate

B. Calcitonin

C. Dexa Scan

D. Raloxifene

E. Vit. D

c. The National Osteoporosis Foundation (NOF) recommends that all women aged 65 years or older be screened for osteoporosis, regardless of risk factors. Central DEXA is the gold standard for assessing bone mineral density (BMD).

28. A 50 years old female comes with Dexa Scan report showing T score of -2.5. Her BMI is 14kg/M2. She is not taking any exercise. What would be single most appropriate step?

A. Raloxifen

B. Alendronate

C. Calcium

D. Inj Vit. D

E. Repeat Dexa Scan

b. First-line treatment options for prevention and treatment of osteoporosis include the bisphosphonates, such as alendronate, risedronate, and ibandronate, and zoledronic acid. Bisphosphonates work by inhibiting osteoclastic activity as well as binding to hydroxyapatite to decrease bone resorption.

29. A 66 years old woman comes with the report of Dexa Scan showing T-Score of -5 in both hip and spine. She had been on Alendronate for 5 years when she had the Scan and it was -1 at that time. During this period she had several fragility fractures. What would be the next best option for her problem?

A. Increase Alendronate

B. HRT

C. Raloxifen

D. Tamoxifen

E. Calcitonin

c. Raloxifene, a SERM, demonstrates partial agonist/ antagonist effects on estrogen receptors depending on the target organ site. At the bone, raloxifene selectively binds to estrogen receptors and inhibits bone resorption. Raloxifene is FDA-approved for both the prevention and treatment of osteoporosis. Although raloxifene decreases the risk of vertebral fracture, there is no evidence that it decreases the risk of nonvertebral fractures including the hip. Raloxifene does not increase the risk of endometrial carcinoma and may reduce the incidence of invasive breast cancer. However, patients should be warned that the use of SERMS carries the same risk of thromboembolic events as oral ET, as well as an increased incidence of vasomotor symptoms (hot flashes).

30. A 55 year old female has been on long-term steroids for chronic obstructive pulmonary disease. She complains of pain in her right groin radiating down the anteromedial thigh She has an abnormal gait. There is decreased range of movement especially flexion, abduction and internal rotation of right hip. What is the most likely diagnosis?

A.Osteoarthritis

B.Rheumatoid arthritis

C.Pseudoclaudication

D.Avascular necrosis

E. Osteoporosis

d. AVN - May present with hip pain. Have a high level of suspicion in patients with risk factors—SLE, sickle cell disease, high alcohol consumption, pregnancy, or corticosteroids. X-ray or bone scan may confirm diagnosis but MRI is most sensitive. Specialist management is needed. Usually progresses to cause OA.

31. A 30 years old female presents with painful swelling of both hands particularly proximal interphalangeal joints for last 1 month. These symptoms are worse in the early morning. What would be the most likely diagnoses?

A. Fibromyalgia

B. Osteoarthritis

C. Polymyalgia Rheumatica

D. Polymyositis

E. Rheumatoid arthritis

e. Rheumatoid Arthiritits - Usually starts with symmetrical small joint involvement—i.e. pain, stiffness, swelling, and functional loss (especially in the hands)—joint damage and deformity occur later, Predominantly peripheral joints are affected—symmetrical joint pain, effusions, soft tissue swelling, early morning stiffness. Progression to joint destruction and deformity. Tendons may rupture.

32. A 30 years old female comes with X-Ray of both hands which show soft tissue swelling and bones and joints appear normal. She has painful swelling of her hands, wrists and feet. What is the most likely diagnosis?

A. Osteoarthritis

B. Osteoporosis

C. Pseudogout

D. Rheumatoid arthritis

E. Systemic Lupus Erythematosis

d. Rheumatoid Arthiritits - X-rays—normal, periarticular osteoporosis or soft tissue swelling in the early stages; later—loss of joint space, erosions, and joint destruction

33. A 40 years old female comes with the pain, swelling and stiffness of hands, feet and knees for 4 weeks. Her proximal interphalangeal joints, wrists are swollen and boggy. Her reports show

ESR	45 mm/Hr
Uric acid	6.0 mg/dl
RA factor	Negative

What is the most appropriate option at this stage?

A. No need of Methotrexate if pain is controlled

B. Start Methotrexate after 4 weeks of NSAIDS

C. Start Methotrexate after 4 weeks of Prednisolone

D. Start Methotrexate after 6 months

E. Start Methotrexate immediately

e. According to NICE Guidelines [NG100] - Offer first-line treatment with cDMARD monotherapy using oral methotrexate, leflunomide or sulfasalazine as soon as possible and ideally within 3 months of onset of persistent symptoms.

Consider hydroxychloroquine for first-line treatment as an alternative to oral methotrexate, leflunomide or sulfasalazine for mild or palindromic disease.

34. A 50 years old female comes with the reports showing Rheumtoid arthritis and you plan to start disease modifying drugs like methotrexate. What test will you perform Before starting Methotrexate?

A. 24 hr urine proteins

B. CRP

C. ESR

D. LFT'S

E. RA Factor titres

d. DMARDs can take several months to show any effect. Before starting check baseline U&E, Cr, eGFR, LFTs, FBC and urinalysis. OHGP 5th Ed Page 490

35. A 40 years old female known patient of Rheumatoid arthritis comes with dry cough and shortness of breath. She has bilateral fine crepts on chest auscultation. Which drug is most likely responsible for her problem?

A. Captopril

B. Chloroquine

C. Ibuprofen

D. Methotrexate

E. Prednisolone

d. Ask to report symptoms/signs of infection—especially sore throat, If severe respiratory symptoms <6mo after starting, refer to A&E, If MCV >105fL check vitamin B12/folate. In this patient ILD – Fibrosing Alveolitis is most lilkey due to Merthotrexate. OHGP 5th Ed Page 491

36. A 40 years female known patient of Rheumatoid arthritis already on Methotrexate comes for follow up. Her weekly LFT's are normal in first month. When will you recheck her LFT's?

A. 1 month

B. 2 months

C. 4 months

D. 6 months

E. 12 months

a. Routine monitoring - FBC, U&E, eGFR, and LFT weekly until dose and monitoring are stable. Then monthly for at least 1y. Frequency of monitoring may be ↓ by specialist if disease/dose stable after 1y. CXR within 1y of start of treatment. Check baseline lung function if lung disease. OHGP 5th Ed Page 491

37. A 50 years old female known patient of Rheumotoid arthritis comes for follow up. You are planning to start Leflunomide. What would you check before starting Leflunomide?

A. Blood Pressure

B. BMI

C. Heart rate

D. Respiratory Rate

E. Tendon Reflexes

a. FBC and LFT monthly for 6mo then, if stable every 2mo, side effects are Rash, GI, ↑ BP, ↑ ALT Check weight and BP at each review. OHGP 5th Ed Page 491

38. A 48 years old female presents with dry skin, dry mouth and dyspareunia for last 3 months. She is taking Sulphasalazine, Naproxen, prednisolone since 8 months. What would be the most likely diagnosis?

A. Antiphospholipid syndrome

B. CREST syndrome

C. Felty's syndrome

D. Raynaud's syndrome

E. Sjogren's syndrome

e. Primary Sjögren's syndrome Under-recognized cause of fatigue and dryness of skin/mucous membranes (may present with dyspareunia). Often presents with nodal OA. Long-term, associated with lymphoma. Autoimmune profile is characteristic. OHGP 5th Ed Page 497

39. A 20 years old male presents with backache and stiffness for last 6 weeks. These symptoms are more in the morning. Flexion of back is restricted and there is loss of lumber lordosis. What would be the most likely diagnosis?

A. Ankylosing spondylitis

B. Postural back pain

C. Prolapsed intervertebral disc

D. Spinal stenosis

E. Spondylolisthesis

a. Ankylosing spondylitis - Typically presents with morning back pain/stiffness in a young man. Progressive spinal fusion (ankylosis) leads to ↓ spinal movement, spinal kyphosis, sacroiliac (SI) joint fusion, neck hyperextension and neck rotation. OHGP 5th Ed Page 492

40. A 20 years old male presents with backache and stiffness for last 6 months. These symptoms are more in the morning. Flexion of back is restricted and there is loss of lumbar lordosis. What would be the most appropriate initial diagnostic investigation?

A. Bone scan

B. ESR

C. HLA B27

D. Lumbosacral X-RAY

E. MRI spine

d. X-ray Initial signs are widening of the SI joints and marginal sclerosis—later SI joint fusion and a 'bamboo spine' (vertebral squaring/fusion). OHGP 5th Ed Page 492

41. A 25 years old female presents with hair loss, urticaria & rash on the face, nose and forehead and also pain in wrists and elbow joints for last 1 month. Lab tests show; Hemoglobin 9 g/dl, platelets 120,000 & protein ++ in urine. What would be the most likely diagnosis?

A. Antiphospholipid syndrome

B. IgA nephropathy

C. Nephrotic syndrome

D. Systemic lupus erythematosus

E. Systemic Sclerosis

d. The 25-year-old female presents with hair loss, urticaria, facial rash (malar rash), joint pain (arthritis), anemia, thrombocytopenia, and proteinuria, all indicative of systemic lupus erythematosus (SLE). OHGP 5th Ed Page 496

42. A 25 years old female presents with pain in knee, elbow, wrist joint, hair loss, urticaria and photosensitivity for last 2 months. Lab reports show Hb 8.5 g/dl platelets 110000 - (150000

450000) & protein urea, BP 160/100 and splenomegaly. What would be the most confirmative diagnostic test?

A. Antinuclear Antibodies

B. Bone marrow biopsy

C. Double stranded DNA

D. Hb Electrophoresis

E. Ultrasound abdomen

c. Check an autoimmune profile—95% are ANA (anti-nuclear antibody) +ve. Other immunological abnormalities—↑ double-stranded DNA, RhF +ve (40%), ↓ complement (C3, C4). FBC: ↓ Hb, ↓ WCC, ↑ ESR. OHGP 5th Ed Page 496

43. A 30 years old woman presents with tiredness and palpitation for 6 months. She is worried because she can not take care of her six children at home. Her husband is a rickshaw driver and is away most of time. What is the most probable cause of her problem?

A. Anaemia

B. Depression

C. Diabetes

D. Hypothyroidism

E. Stress

a. Chronic tiredness, palpitations, and her inability to manage daily tasks suggest iron deficiency anaemia, which is common in women with multiple pregnancies due to nutritional deficiencies. Stress and depression could be contributing factors, but anaemia is the most likely primary cause.

44. A 73 years old woman presents with several months history of breathlessness on exertion. She prefers to sit than lying down in bed. There is ankle edema and bilateral basal crepitations. What is the most likely cause of her problem?

A. Anaemia

B. Heart failure

C. Hypoproteinaemia

D. Hypothyroidism

E. Renal failure

b. The patient has progressive breathlessness on exertion, orthopnea (preferring to sit rather than lie down), ankle edema, and bilateral basal crepitations, which are classic signs of heart failure.

45. A 19 years old student presents with tiredness, weakness and difficulty in concentrating. He had sore throat 1 month ago. What would be the cause of his problem?

A. Acute postviral fatigue

B. Glandular fever

C. Gullian Barre syndrome

D. Initial HIV infection

E. Tuberculosis

a. The patient is a young student with tiredness, weakness, and difficulty concentrating after a sore throat one month ago, which suggests postviral fatigue syndrome. This is a common sequela of viral infections, including Epstein-Barr virus (EBV) or other respiratory viruses.

46. A 64 years old man presents with a 3 months history of tiredness, weight loss of 4 kg and diarrhea. What is the most probable cause of his problem?

A. Coeliac disease

B. Diverticular disease

C. Hyperthyroidism

D. Intestinal tuberculosis

E. Malignancy

e. The patient is elderly (64 years old) with a 3-month history of tiredness, weight loss, and diarrhea, which raises suspicion for malignancy, especially gastrointestinal cancer (e.g., colorectal or pancreatic cancer).

47. A 36 years old female presents with tiredness, weight loss, leg pains, dry mouth for last 2 months. Her symptoms increase with activity and improve with rest. Her father died 3 months ago during surgery for gangrenous leg. What would be the most probable cause?

A. Anaemia

B. Depression

C. Diabetes Mellitus

D. Hyperthyroidism

E. Sjogren's syndrome

b. Her symptoms, including tiredness, weight loss, leg pains, and dry mouth, along with a recent major stressor (her father’s death), suggest depression. Fatigue worsening with activity and improving with rest is also characteristic of depression-related fatigue rather than metabolic or autoimmune causes.

48. A 25 years old man presents with persistent tiredness which is worse in the morning for last 6 months after death of his father due to complications of diabetes. What would be the most probable cause?

A. Chronic fatigue syndrome

B. Depression

C. Diabetes Mellitus

D. Hypothyroidism

E. Myasthenia gravis

b. The patient has persistent tiredness for 6 months, which is worse in the morning and started after his father's death, indicating a psychological cause. Depression commonly presents with fatigue, low energy, and worsening symptoms in the morning (diurnal variation).

49. A 35 years old woman presents with aching all over the body for last 1 year. She also complains of chronic headache, difficulty in sleeping and paraesthesia of hands. These symptoms become worse in cold weather and in the morning. Her shoulder, back, neck and elbows, have sore areas. What would be the most likely diagnosis?

A. Chronic fatigue syndrome

B. Fibromyalgia

C. Polymyalgia Rheumatica

D. Polymyositis

E. Somatization disorder

c. Painful, non-articular condition of unknown cause, predominantly involving muscles. Fibromyalgia is common and often results in significant disability. Peak age 40–50y; 90% female. History of widespread pain (defined as pain on both left and right sides, above and below the waist, together with axial skeletal pain, e.g. neck or back pain), in combination with

Pain in ≥11 out of 18 tender sites on digital palpation. OHGP 5th Ed Page 504

50. A 30 years old woman presents with aching and hurting some parts of her body for last 6 months. These symptoms are worse in the morning. In order to make the diagnosis of Fibromyalgia how many tender points should be present?

A. 7

B. 9

C. 11

D. 13

E. 15

c. Pain in ≥11 out of 18 tender sites on digital palpation. OHGP 5th Ed Page 504

51. A 25 years old female presents with 12 tender areas over the body for the last 4 months. There is paraesthesia of hands and feet also. What would be treatment to help

her symptoms?

A. Amitriptyline

B. Dexamethasone

C. Fluoxetine

D. Ibuprofen

E. Tizanidine

a. Low-dose amitriptyline 25–75mg nocte may help with sleep/pain. SSRI, e.g. sertraline 25–50mg od may help anxiety, depression, and sleep—stop if no improvement after a month’s trial

52. A 30 years old male presents with pain at 2nd rib which is enhanced by coughing and sneezing There is marked localized tenderness at 2nd rib. What would be the diagnosis?

A. Chronic fatigue syndrome

B. Dressler's syndrome

C. Myocardial ischemia

D. Spontaneous pneumothorax

E. Tietze syndrome

e. Idiopathic costochondritis. Pain is enhanced by motion, coughing, or sneezing. The 2nd rib is most commonly affected. Examination: marked localized tenderness. Differential diagnosis: muscular sprain; rarely inflammatory chest wall enthesitis/osteitis 2° to spondyloarthropathy. OHGP 5th Ed Page 505

53. 35 years old patient of Tietze syndrome is not improving despite of taking Ibuprofen in high doses. What would be the next drug for his problem?

A. Inj.diazepam

B. Inj.Diclofenac

C. Inj.Hydrocortisone

D. Inj.morphine

E. Inj.Triamcinolone

e. Explanation and reassurance that nothing serious is happening; simple OTC analgesia, e.g. ibuprofen 400mg tds. If pain persists local steroid or bupivacaine injections can be helpful. If not settling, consider referral to rheumatology. OHGP 5th Ed Page 505

54. A 30 years old female presents with 6 months history of joint pain without swelling. unrefreshing sleep, impaired concentration & tender cervical lymph nodes. Whenever she performs a heavy work, after two days she develops extreme tiredness which is not relieved by rest and all her symptoms worsen. What would be the diagnosis?

A. Chronic fatigue syndrome

B. Depression

C. Fibromyalgia

D. Hyperthyroidism

E. Tietze syndrome

a. A debilitating and distressing condition. Cause is unknown though viral infections (810% after EBV), immunization, chemical toxins (e.g. organophosphates, chemotherapy drugs) have all been implicated.

Fatigue must have been present for ≥4mo for adults and ≥3mo for children and young people for a diagnosis of CFS to be made. OHGP 5th Ed Page 502

55. 30 years old patient comes with tiredness all the time for the last four months which started after the death of his wife. What would be the most appropriate treatment option?

A. Alprazolam

B. Amitriptyline

C. Buspirone

D. Risperidone

E. Sertraline

e. The patient has persistent tiredness for four months following his wife's death, which suggests major depressive disorder (MDD) or prolonged grief reaction. Sertraline (SSRI) is the first-line treatment for depression, especially in cases with low energy, sadness, and impaired daily functioning

56. A 30 years old male presents with oval plaques on face, and scalp. Lesions are well defined red and scaly. Scarring leaves alopecia on scalp. What would be the diagnosis?

A. Discoid lupus

B. Eczema

C. Erythema multiform

D. Fungal infection

E. Leishmaniasis

a. ≥1 well-defined, red, round/oval plaques on the face, scalp, or hands. Scarring may ← scalp alopecia and skin hypopigmentation. Internal involvement is not a feature. Confirm with lesion biopsy. Investigate with an autoimmune profile as for SLE. Treat with potent topical steroids and sunscreen. Remission occurs in 40%. 5% develop SLE. OHGP 5th Ed Page 496

57. A 30 years old female comes that a doctor has diagnosed her case of chronic fatigue syndrome. She wants to confirm the diagnosis by laboratory test. Which lab test is specific for this condition?

A. Blood C/E

B. Blood sugar

C. None

D. RA Factor

E. TSH

c. There is no specific laboratory test for diagnosing chronic fatigue syndrome (CFS); it is a clinical diagnosis based on persistent, unexplained fatigue lasting more than 6 months, along with associated symptoms like unrefreshing sleep, cognitive impairment, and post-exertional malaise. Other conditions, such as anemia, diabetes, hypothyroidism, and autoimmune diseases, must be ruled out.

58. A 30 years old female presents with tiredness, depression, lethargy and constipation for last 1 month. Her past history is unremarkable. Her BP is 120/70, pulse 55/min. What would be the single most appropriate test?

A. T3

B. T4

C. Thyroid scan

D. Thyroid ultrasound

E. TSH

e. The most appropriate initial test for a patient with tiredness, depression, lethargy, constipation, bradycardia, and no significant past history is TSH (Thyroid-Stimulating Hormone) to screen for hypothyroidism, which commonly presents with these symptoms. If TSH is elevated, further tests like free T4 can confirm the diagnosis.

59. A 30 years old female diagnosed patient of Systemic Sclerosis presents with B.P of 160/100 mm of Hg on three occasions. Despite all life style changes BP is still not controlled. Which is the most appropriate antihypertensive for this patient?

A. Atenolol

B. Captopril

C. Diltiazem

D. Furosemide

E. Nifedipine

e. Systemic sclerosis - Spectrum of disorders causing fibrosis and skin tightening (scleroderma). Raynaud's is usually present, ± ↑ BP, lung fibrosis, GI symptoms, telangiectasia, polyarthritis, and myopathy. Provide education/support. Treat symptoms with Nifedipine. Early specialist referral is vital. CREST (**C**alcinosis of subcutaneous tissues; **R**aynaud's; **E**sophageal motility problems; **S**clerodactyly and **T**elangiectasia) has better prognosis. OHGP 5th Ed Page 497

60. A 20 years old female presents with pain in her fingers whenever she takes out ice from refrigerator and whenever she is excited. She needs to rewarm her fingers to relieve pain. Otherwise, her health is fine. What would most likely diagnosis?

A. CREST syndrome

B. Raynaud's phenomenon

C. Raynaud's syndrome

D. Sjogren's syndrome

E. Systemic sclerosis

b. The most likely diagnosis is Raynaud's phenomenon, which presents as episodic vasospasm of the fingers triggered by cold exposure or emotional stress, leading to pain and color changes (pallor, cyanosis, and then redness) that improve with rewarming. Raynaud's phenomenon is often primary (idiopathic) but can also be secondary to autoimmune conditions like CREST syndrome or systemic sclerosis.

61. A 20 years old female presents with fingers ache blue discoloration in cold weather Fingers become red on rewarming and pain disappears. How would you treat the problem?

A. Atenolol

B. Isosorbide

C. Naproxen

D. Nifedipine

E. Paracetamol

d. Keep warm—socks/gloves/hats in cold weather, hand warmers, stay inside. Avoid drugs that ↑ symptoms, e.g. β-blockers. Stop smoking. Nifedipine 10–20mg tds, amlodipine 5mg od, or fluoxetine 20mg od(unlicensed) may help. If associated/severe symptoms refer to rheumatology (urgently if critical ischaemia, e.g. ulceration/infarcts on fingers). OHGP 5th Ed Page 497

62. A 25 year laborer suddenly develops severe pain & stiffness in his neck. He is holding his head in a tilted position. What would be the diagnosis?

A. Cervical disc prolapse

B. Cervical spondylosis

C. Cervical subluxation

D. Spasmodic torticollis

E. Whiplash injury

d. Spasmodic torticollis Head is pulled to one side and held there by a contracting sternomastoid muscle. Treat with massage, heat, analgesia, ± physiotherapy. OHGP 5th Ed Page 449

63. A 60 year patient complains of pain in his neck for last 1 week. Pain is intermittent & comes on activity. Neck movements are limited? What would be the diagnosis?

A. Cervical disc prolapse

B. Cervical spondylosis

C. Multiple Myeloma

D. Paget's disease

E. Spasmodic torticollis

b. Cervical spondylosis - Degenerative disease of the cervical spine. May cause pain but minor changes are normal (especially >40y) and usually asymptomatic. Pain is generally intermittent and related to activity. Examination reveals ↓ neck mobility. Severe degeneration can cause nerve root signs. Treat with analgesia. X-ray only if conservative measures fail, troublesome pain, nerve root signs, or psoriasis (psoriatic arthropathy). OHGP 5th Ed Page 448

64. A 50 year old patient presents with pain & stiffness of neck, arms & fingers for last 1 month. Power & sensations are reduced in affected area. He has used Ibuprofen & cervical collar but no relief. X-ray neck is normal. What would be the next appropriate step in management?

A. Bone scan

B. CT scan of neck

C. MRI of neck

D. Myelography

E. Nerve conduction studies

c. The next appropriate step is MRI of the neck, as it provides detailed imaging of soft tissues, spinal cord, and nerve roots. Given the persistent pain, stiffness, weakness, and sensory loss despite treatment, the concern is for cervical myelopathy, disc herniation, or spinal cord compression, which MRI is best suited to evaluate

65. A 20 years old person have an accident of his car 3 days ago at that time he was normal except a mild pain in his neck. Now he suddenly develops severe pain which radiates to arms and decreased movements of his neck. What would be the diagnosis?

A. Cervical disc prolapse

B. Cervical spondylosis

C. Cervical subluxation

D. Spasmodic torticollis

E. Whiplash injury

e. Whiplash injury - Neck pain caused by stretching/tearing of cervical muscles and ligaments due to sudden extension of the neck—often due to a RTA. Pain and ↓ neck mobility typically starts several hours or days after injury. Pain may radiate to shoulders, arms, and head. OHGP 5th Ed Page 449

66. A 30 years patient presents with backache for last 3 days. He is taking Diclofenac for his backache. What would be your advice regarding bed rest?

A. 1 week

B. 2 weeks

C. 3 weeks

D. 4 weeks

E. None

e. Prolonged bed rest is not recommended for acute back pain. Instead, patients should be encouraged to stay active, continue daily activities as tolerated, and use NSAIDs like Diclofenac for pain relief. Bed rest for more than 48 hours can lead to muscle deconditioning and worsen recovery.

67. A 38 years old construction worker had back pain which subsided within 24 hours. He now complains of increasing numbness & tingling in both legs & leaking of urine. Which is the single best management step?

A. Naproxen

B. Oxybutanine

C. Physiotherapy

D. Referral

E. X-ray Lumbar spine

d. The patient has red flag symptoms of cauda equina syndrome, including bilateral leg numbness, tingling, and urinary incontinence, which indicate spinal cord compression. This is a medical emergency, requiring urgent referral for MRI and possible surgical decompression to prevent permanent neurological damage.

68. A 35 years old patient presents with backache for last 4 months. She has used different medicines which relieve symptoms temporarily. Her sleep is disturbed and she has epigastric burning. What would be the single best drug for her back problem?

A. Amitriptyline

B. Citalopram

C. Diazepam

D. Gabapentin

E. Tizanidine

a. The patient has chronic back pain with poor sleep and epigastric burning, suggesting neuropathic pain and possible fibromyalgia. Amitriptyline, a tricyclic antidepressant, is effective for chronic pain management, improves sleep, and has analgesic effects. It is preferred over NSAIDs to avoid worsening gastric symptoms.

69. A 75 years old person complains of severe backache for last three weeks. He has used many pain killers, but no relief. What would be the next appropriate step in management?

A. CT scan

B. MRI

C. Physiotherapy

D. Refer

E. X-ray

e. In an elderly patient with severe back pain for three weeks unresponsive to painkillers, the first step is to rule out osteoporotic fractures, malignancy, or infections. An X-ray is the initial investigation to assess for vertebral fractures, lytic lesions, or degenerative changes. If suspicion remains high, MRI can be considered next.

70. A 60 years old patient of prostate cancer presents with severe pain in his back. He is on hormone therapy. What is the most appropriate drug to decrease the number of new sites of back pain?

A. Dicloran

B. Morphine

C. Pantazoan

D. Pethidine

E. Radioactive strontium

e. The patient has prostate cancer with severe back pain, likely due to bone metastases. Radioactive strontium-89 is used for bone pain palliation in metastatic prostate cancer and helps reduce the development of new metastatic bone lesions.

71. A 30 years old patient presents pain on internal rotation of shoulder joint for the last one month. What would be the next appropriate investigation?

A. Arthroscopy

B. CT Scan

C. MRI

D. Myelogram

E. X-rays

e. Subacromial impingement Pain occurs in a limited arc of abduction (60–120°—painful arc syndrome) or on internal rotation. If <40y, associated with glenohumeral instability from connective tissue laxity, or labral injury. If older, often due to chronic rotator cuff tendinitis or functional cuff weakness/tear. OHGP 5th Ed Page 455

72. A 50 years old diabetic patient presents with painful shoulder and limitation of movements. There is more pain at night. What would be the diagnosis?

A. Adhesive capsulitis

B. Osteoarthritis of shoulder

C. Polymyalgia rheumatica

D. Rotator cuff injury

E. Shoulder dislocation

d. Rotator cuff injury : Acute tendinitis Often due to excessive use/trauma in patients <40y. Presents with severe pain in the upper arm. Patients hold the arm immobile and are unable to lie on the affected side. Usually starts to resolve spontaneously after a few days. In middle age can be caused by inflammation around calcific deposits—requires steroid injection. OHGP 5th Ed Page 455

73. A 25 years weight lifter suddenly feels a lump and discomfort in his upper arm while lifting weight one day before. He has full range of movement of shoulder. What will be the appropriate treatment for him?

A. Diclofenac

B. Physiotherapy

C. Re-assurance

D. Steroid injection

E. Surgery

c. Rupture of the long head of biceps - Discomfort in the arm on lifting and a feeling of ‘something going’. A lump appears in the body of biceps muscle on elbow flexion. May be associated with other shoulder pathology. Management: exclude distal rupture of the tendon at the elbow. **Reassure**. No treatment necessary. OHGP 5th Ed Page 455

74. A 30 years old badminton player presents with pain in his elbow while playing for last 1 week. There is pain on resisted wrist extension. What would be the diagnosis?

A. Dislocated elbow

B. Golfer elbow

C. Olecranon Bursitis

D. Tennis elbow

E. Ulnar neuritis

d. Tennis elbow—tenderness over the lateral epicondyle and lateral elbow pain on resisted wrist extension. OHGP 5th Ed Page 456

75. A 35 years gardener presents with pain in his lateral side of wrist joint. While gardening for the last 10 days. Pain is worse in the morning? What will be the diagnosis?

A. Bursitis

B. Carpel tunnel syndrome

C. De-Quervain Tenosynovitis

D. Ganglion

E. Ulner neuritis

c. De Quervain’s tenosysnovitis - Tenosynovitis of thumb extensor and abductor tendon sheaths. Pain over radial styloid and on forced adduction/flexion of the thumb. Treat with thumb splint ± local steroid injection. Refer if not settling. OHGP 5th Ed Page 460

76. A 32 week pregnant lady present with pain the lateral side of hand and fingers for the last weeks. She also complains of pins, needle numbness & wasting of thenar muscles. Which will be responsible for her symptoms?

A. Lateral cutaneous nerve of arm

B. Lateral cutaneous nerve of forearm

C. Median Nerve

D. Radial Nerve

E. Ulnar Nerve

c. Median Nerve - Loss of sensation over lateral 3½ fingers and palm, wasting of the thenar eminence, Inability to flex the terminal phalanx of the thumb implies involvement of the anterior interosseous branch, caused by Trauma (especially wrist lacerations), carpal tunnel syndrome. OHGP 5th Ed Page 513

77. 40 years diabetic male presents with pain in his middle finger. Finger is in fixed flexion position. What will be the most appropriate diagnosis?

A. Dupuytren contracture

B. Fractured finger

C. Mallet finger

D. Median nerve injury

E. Trigger finger

e. Trigger finger - Nodules on the tendon can occur spontaneously and in RA and DM. Most common in ring and middle fingers. The nodule can be palpated moving with the tendon. Pain and triggering (the finger is in fixed flexion and needs to be flicked straight by the other hand) occur because the nodule jams in the tendon sheath. Management: local steroid injection or refer for surgical release. OHGP 5th Ed Page 461

78. A 30 years old patient present with loss of sensation over lateral side of hand & he is unable to lift the thumb out of the plane of palm. He is unable to grasp the objects. Which nerve is responsible for his problem?

A. Axillary Nerve

B. Brachial Nerve

C. Median Nerve

D. Radial Nerve

E. Ulnar Nerve

c. The median nerve controls grasp. Damage causes inability to lift the thumb out of the plane of the palm (abductor pollicis brevis failure) and loss of sensation over the lateral side of the hand. OHGP 5th Ed Page 459

79. A 30 years old asthmatic patient presents with severe hip pain & he is unable to walk for last 15 days. He is taking high doses of steroid. What would be the most sensitive test for the diagnosis?

A. CT scan hip joint

B. ESR

C. MRI hip joint

D. Myelogram

E. X-ray hip joint

c. Avascular necrosis - May present with hip pain. Have a high level of suspicion in patients with risk factors—SLE, sickle cell disease, high alcohol consumption, pregnancy, or corticosteroids. X-ray or bone scan may confirm diagnosis but MRI is most sensitive. Specialist management is needed. Usually progresses to cause OA. OHGP 5th Ed Page 464

80. A 15 years old girl presents with severe pain in her knee on walking up and down stairs & on prolonged sitting the last one month. All conservative measures have failed. What would be the next appropriate step in management?

A. X-rays of knee

B. CT scan of Knee

C. MRI of Knee

D. Myelogram

E. Arthroscopy

e. Chondromalacia patellae - Common in teenage girls. Pain on walking up or down stairs or on prolonged sitting. Signs: pain on stressing the undersurface of the patella. Arthroscopy (indicated only in severe cases) reveals degenerative cartilage on the posterior surface of the patella. Treat with analgesia + physiotherapy (vastus medialis strengthening ↓ pain in 80%). If persistent, exclude spondyloarthropathy and refer to orthopaedics for arthroscopy. OHGP 5th Ed Page 469

81. A 15 years athlete presents with pain & swelling over the tibial tubercle for last 20 days. What will be the diagnosis?

A. Growing pain

B. Infrapatelar Bursitis

C. Osgood Schlatter disease

D. Osteoarthritis of knee

E. Perthe's disease

c. Osgood Schlatter disease - Seen in athletic teenagers. Pain and tenderness ± swelling over the tibial tubercle. X-rays not required. Avoid aggravating activities. Usually settles over a few months. If not settling refer to orthopaedics or rheumatology for further assessment. OHGP 5th Ed Page 469

82. A mother brings her 5 year old child with complains of waking up at night because of leg pain. He is fine in day time. What will be the most likely diagnosis?

A. Chondromalacia patellae

B. Growing pain

C. Juvenile rheumatoid arthritis

D. Osgood schlatter disease

E. Restless leg syndrome

b. Nocturnal musculoskeletal pains (growing pains) - Episodic, muscular pains, usually in the legs, lasting 730min and waking the child from sleep. Rubbing the limb brings rapid relief. There is no pain or disability in the morning. Diagnosis can be made on history if there are no associated symptoms and examination is normal. If in doubt, check FBC and ESR—which should be normal. In most cases reassurance ± analgesia are all that is needed. In resistant cases, physiotherapy may help. OHGP 5th Ed Page 447

83. A 38 year housewife presents with knee pain & swelling over the knee joint while doing her job for last 2 months. What will be the most likely diagnosis?

A. Baker's cyst

B. Chondromalacia patellae

C. Infrapatellar Bursitis

D. Osgood Schlatter disease

E. Osteoarthritis

c. Bursitis - Prepatellar bursitis (housemaid's knee) is associated with excess kneeling. Vicar's knee (infrapatellar bursitis) is associated with upright kneeling. Avoid aggravating activity, aspirate ± steroid injection (↓ recurrence). If infected treat with antibiotics ± refer for drainage. OHGP 5th Ed Page 468

84. A 25 years old footballer is hit on lateral side of knee during a match. He complains of severe pain & swelling over medical side of knee. What will be the most probable injury?

A. Lateral collateral ligament injury

B. Lateral meniscus injury

C. Medial collateral ligament injury

D. Medial meniscus injury

E. Posterior cruciate ligament injury

c. Common in contact sports. Causes knee effusion if severe ±tenderness over the injured ligament. Collateral ligaments provide lateral stability to the knee. Normally there is <5° of movement—if >5° the ligament may be ruptured. Treat with rest, knee support, analgesia. Refer to orthopaedics if rupture is suspected. OHGP 5th Ed Page 468

85. A 30 year old patient present with pain & swelling behind the knee joint after his knee has been hit with a dash board in a car accident 3 years ago Anterior cruciate ligament injury

A. Lateral collateral ligament injury

B. Lateral meniscal injury

C. Medical collateral injury

D. Medical meniscal injury

E. Posterior cruciate ligament injury

e. Posterior cruciate tears Caused, e.g. when the knee hits the dashboard in car accidents. Reverse draw test is +ve (supine with knee at 90°, apply pressure to push the tibia backwards—test is +ve if the tibia moves backward on the femur). OHGP 5th Ed Page 468

86. A 42 years clerk complains of difficulty in walking because of pain and swelling of right knee joint which started when he jumped out of a running bus. He cannot make his knee straight. What is the most appropriate investigation?

A. CT scan

B. ESR

C. Knee Aspiration

D. MRI

E. X-ray

d. Meniscal lesions - Twisting with the knee flexed can cause medial (bucket handle) meniscal tears and adduction with internal rotation can cause lateral cartilage tears. Symptoms/signs:

- Locking of the knee—extension is limited due to cartilage fragment lodging between the condyles
- Giving way of the knee

- Tender joint line
- +ve McMurray's test—rotation of the tibia on the femur with flexed knee followed by knee extension causes pain and a click as the trapped cartilage fragment is released. reliability of this test is debated

Management - Refer for MRI ± arthroscopy. Treated by removal of the torn meniscal fragment. OHGP 5th Ed Page 469

87. A 30 years old female presents with severe pain in her heel for last 20 days. Pain is worse in first few steps in the morning. What will be the most appropriate diagnosis?

A. Achilles tendonitis

B. Hair line fracture

C. Heel spur

D. Plantar fasciitis

E. Rheumatoid arthritis

d. Plantar fasciitis/bursitis - Common cause of inferior heel pain especially among runners. Pain is worst when taking the first few steps after getting out of bed. Usually unilateral and generally settles in <6wk. Advise shoes with arch support, soft heels, and heel padding (e.g. trainers). Achilles tendon stretching exercises can help; NSAIDs and steroid injection are also helpful. In persistent cases refer to podiatry (for fitting of an insole) ± orthopaedics. OHGP 5th Ed Page 470

88. A 55 year old patient presents with lateral deviation of big toe for last two months. He also likes to wear pointed shoes. What will be the most likely diagnosis?

A. Hallux rigidus

B. Hallux valgus

C. Morton's metatarsalgia

D. Morton's Neuroma

E. Pes cavus

b. Hallux valgus (bunion) - Lateral deviation of the big toe at the MTP joint exacerbated by wearing pointed shoes ± high heels. A bunion develops where the MTP joint rubs on footwear. Arthritis at the MTP joint is common. Bunion pads can help but severe deformity requires surgery. OHGP 5th Ed Page 473

89. A 68 year old man had a hip replacement 4 week ago. He presents with a 10 days history of feeling unwell, intermittent fever, weight loss & pain in the hip. What will be the most likely diagnosis?

A. Avascular necrosis

B. Malignant arthritis

C. Osteoarthritis

D. Septic arthritis

E. Trochanteric bursitis

d. Septic arthritis - The most important differential diagnosis for acute gout. It is most common in children <5y old and most commonly affects the hip or knee, but septic arthritis can occur at any age and affect any joint. The patient is usually systemically unwell and holds the affected joint completely still. The joint may be swollen, hot, and tender. This is an orthopaedic emergency—if suspected admit. Treatment is with IV antibiotics ± surgical washout of the joint. OHGP 5th Ed Page 494

90. A 65 years old woman presents with acute pain at lateral side of upper thigh. She has osteoarthritis in both knees & hips. There is tenderness and swelling on lateral side of hip joint. What will be the most likely diagnosis?

A. Avascular neorisis

B. Fascia lata syndrome

C. Pathological fracture

D. Septic arthritis

E. Trochanteric bursitis

e. Greater trochanter pain (trochanteric bursitis) - Can mimic ± coexist with hip OA. May be associated with muscle weakness around the hip. Diagnosis: point tenderness over the greater trochanter. Management - Consider local steroid injection if trochanteric bursitis is likely. Refer to physiotherapy to strengthen hip musculature to prevent recurrence. OHGP 5th Ed Page 464

91. A 58 years old office worker has pain & swelling in right elbow. Fluid aspirate is negative for gram stain & crystals. What will be the most likely diagnosis?

A. Golfer's elbow

B. Olecranon bursitis

C. Pseudogout

D. Pulled elbow

E. Tennis elbow

b. Olecranon bursitis - Traumatic bursitis due to repeated pressure on the elbow. Pain and swelling over olecranon. Most settle with conservative treatment (rest, ice, ↓ activity, protective elbow pads). Consider aspiration of fluid from bursa; antibiotics if sepsis suspected. Fluid may reaccumulate—if sepsis has been excluded, consider hydrocortisone injection. Refer if not settling after 2mo or complications. OHGP 5th Ed Page 456

92. A 35 year old patient presents with drooping of fingertip after an accident you advise him plastic splint. For how long he will wear the splint.

A. For 2 weeks

B. For 4 weeks

C. For 6 weeks

D. For 8 weeks

E. For 10 weeks

c. Mallet finger - The finger tip droops due to avulsion of the extensor tendon attachment to the terminal phalanx. Refer for X-ray. Management: a plastic splint which holds the terminal phalanx in extension is worn for 6wk to help union (must not be removed). Arthrodesis may be needed if healing does not occur. OHGP 5th Ed Page 461

93. A 35 years old male runner presents with pain in lateral side of thigh which is worse during running. What will be the most likely diagnosis?

A. Avascular necrosis

B. Duchene's muscular dystrophy

C. Fascia lata syndrome

D. Hip infection

E. Trochnteric burisitis

c. Fascia lata syndrome - Inflammation of the fascia lata causing pain in the lateral thigh. Often due to overuse or weak musculature. Treatment is with rest ±referral to physiotherapy. OHGP 5th Ed Page 465

NEPHROLOGY

1. A 27 years old man comes for follow up visit. His excreted urinary stone analysis shows that it consists of calcium oxalate. He is drinking more than 3 liters of liquids every day. He has a history of passing similar stones in the past. What will you advise him to prevent further stone formation?

A. Allopurinol

B. Bendroflumethiazide

C. D-pencillamine

D. Nitrofurantoin

E. Sodium citrate

b. Thiazide diuretics, such as bendroflumethiazide, reduce urinary calcium excretion by increasing calcium reabsorption in the distal tubule, thereby lowering the risk of calcium oxalate stone formation. Increased fluid intake alone may not be sufficient if recurrent stones persist.

2. A 55 years old male presents with weight loss, passage of small stones in urine, weakness and abdominal pain. His spleen is massively enlarged. WBC is 70 x 109/L, Hb is 8.5 gm/dl with few myeloid precursor cells. How will you prevent further stone formation in this patient?

A. Allopurinol

B. Bendroflumethiazide

C. D-pencillamine

D. Desfuroxamine

E. Pyridoxine

a. This 55-year-old male with massive splenomegaly, leukocytosis (WBC 70 x 10^9/L), anemia, and myeloid precursor cells likely has chronic myeloid leukemia (CML) or another myeloproliferative disorder. His weight loss, abdominal pain, and passage of small stones suggest uric acid stones due to increased cell turnover and hyperuricemia. Allopurinol reduces uric acid levels and helps prevent further stone formation.

3. A 70 years old man presents with recurrent U.T.I's because of benign prostatic hyperplasia. His urine culture report shows proteus species.
What type of stones is he likely to develop?

A. Calcium oxalate

B. Calcium phosphate

C. Cystine stones

D. Triple phosphate

E. Uric acid stones

d. Associated with UTI due to Proteus spp. and urinary stasis, e.g. due to anatomical abnormality. Treat UTI with antibiotics

4. An 80 years old patient of B.P.H. on Prazocin 2 mg OD comes with haematuria. His post void residual urinary volume is 30 ml.
What will be your next management plan?

A. ↑ the doze of prozocin

B. Add finasteride

C. Reassurance

D. Refer to urologist

E. Tranexamic acid

d. An 80-year-old male with BPH on Prazosin presenting with hematuria requires further evaluation to rule out bladder cancer, stones, or other urological pathology. A post-void residual of 30 ml suggests adequate bladder emptying, so increasing Prazosin or adding Finasteride is unnecessary. Tranexamic acid may control bleeding but does not address the underlying cause. Reassurance alone is inappropriate without ruling out serious conditions. Urological referral for cystoscopy and further workup is the best course of action.

5. A 74 years old man comes with decrease in urinary stream and mild dribbling. He is not bothered by these symptoms. His urinalysis is normal; creatinine is 0.9 mg/dl, ultrasound show normal kidneys and bladder. Prostate volume is 40 G.
How is the single most appropriate step in management?
A. Finasteride

B. Referral

C. Terazin

D. Terazosin + Finasteride

E. Watchful waiting

e. This 74-year-old male has mild lower urinary tract symptoms (LUTS) due to BPH but is not bothered by them. His urinalysis, creatinine, kidneys, and bladder are normal, and his prostate volume (40g) is within the mild-to-moderate range. According to NICE guidelines, asymptomatic or mildly symptomatic patients should be managed with watchful waiting rather than immediate medical or surgical intervention.

6. A 78 years old man who is a known patient of B.P.H. worries of having cancer as his neighbor is recently diagnosed with prostate cancer.
Which of the following clinical features is not suggestive of prostate carcinoma?
A. Hard nodule on DRE

B. New onset backache

C. Numbness of legs

D. Painless hematuria

E. Recurrent U.T.I

e. Prostate cancer in its early stages is often symptomless and usually detected incidentally with an elevated PSA or a hard nodule on digital rectal examination (DRE). Local disease manifestations include prostatism, urinary retention, hematuria, lower extremity oedema, and a hard, non-tender prostate with poorly defined sulci on rectal examination. Metastatic disease may present with malaise, weight loss, bone pain, pathological fractures, spinal cord compression, ureteric obstruction leading to renal failure, and symptoms depending on the site of metastases.

7. A 65 years old man has urinary symptoms with hematuria. He is also losing weight and complains of pain in his lower back. What will be the best treatment option for him?

A. Anti-androgens as cyproterone acetate

B. Luetenizing hormone releasing hormone analogues

C. Radical prostatectomy

D. Radioactive strontium and corticosteroids

E. Watchful waiting with PSA/DRE monitoring

b. LHRH analogues are used for hormonal therapy, which slows disease progression by reducing androgen stimulation to prostate cancer cells. Since the patient has systemic symptoms (weight loss, back pain, and hematuria), LHRH analogues are the best initial treatment to control disease progression. Strontium can be added later for pain relief if bone metastases become more symptomatic

8. A 62 years old man comes with frequent urination and poor urinary stream. At night, he has to get up many times due to this problem. He is taking different drugs for his various problems. His bladder is palpable.
Which drug is most likely responsible for his symptoms?

A. Amitriptyline

B. Glimepride

C. Hydrochlorthiazide

D. Lisinopril

E. Pioglitazone

a. Amitriptyline has strong anticholinergic effects, which can cause urinary retention by reducing bladder contractility and increasing outflow resistance. This leads to a palpable bladder, poor urinary stream, and nocturia. In contrast, the other drugs listed do not significantly contribute to urinary retention.

9. An old diabetic female patient comes with frequent and overwhelming desire to void. She wets her clothes before reaching washroom. Her sugar is well controlled. Her problem is precipitated by stress in her daily life. What is the most likely diagnosis?

A. Chronic Renal Failure-

B. Functional incontinence

C. Overflow incontinence

D. Stress incontinence

E. Urge incontinence

e. Urge incontinence is characterized by a sudden, overwhelming need to void with involuntary leakage before reaching the toilet. It is commonly due to detrusor overactivity, often seen in elderly and diabetic patients. Emotional stress can exacerbate symptoms. Since her diabetes is well controlled and there is no mention of neurogenic bladder, overflow incontinence is less likely.

10. 11 years old boy presents with sudden reduction in urine output within last 14-16 hours. He had acute tonsillitis 1 week ago. His lab results show acute rise in creatinine, blood urea and eosinophil count.
What is the cause for his acute renal failure?

A. Acute interstitial nephritis

B. Acute tubular necrosis

C. Membranous G.N.

D. Minimal change G.N.

E. Rapidly progressive G.N.

a. AIN is characterized by acute kidney injury (AKI) with eosinophilia, commonly triggered by drugs (antibiotics, NSAIDs), infections, or autoimmune diseases. In this case, the recent tonsillitis suggests a post-infectious etiology, making AIN the most likely cause. Unlike glomerulonephritis, AIN primarily affects the interstitial tissue rather than the glomeruli.

11. A 16 years old boy comes with ↑ B.P. that is resistant to drugs. He is also having abdominal bruit and his lab reports show increased serum creatinine and proteins in urine.
Which drug is contraindicated in him?
A. Amlodipine

B. Atenolol

C. Enalapril

D. Hydrochlorthiazide

E. Spironolactone

c. The boy likely has renal artery stenosis (RAS), suggested by drug-resistant hypertension, abdominal bruit, elevated creatinine, and proteinuria. ACE inhibitors (like Enalapril) and ARBs are contraindicated in bilateral RAS because they reduce glomerular perfusion by blocking angiotensin-II-mediated vasoconstriction of the efferent arteriole, leading to acute kidney injury (AKI).

12. A mother brings a 6 years old child with swelling of eyelids and face, legs and urinary froth.
His lab reports show:
Creatinine: 0.9 mg/dl
Serum albumin: 2.5 mg/dl
Cholesterol: 320 mg/dl
Urinalysis: Proteins ++++.
What is the most common cause for his problem?
A. Amyloidosis involving kidneys

B. Focal segmental glumerulonephritis

C. Membranous glumerulonephritis

D. Membranous glumerulonephritis.

E. Minimal change nephropathy

d. The child presents with nephrotic syndrome (generalized edema, frothy urine, heavy proteinuria, hypoalbuminemia, and hypercholesterolemia). Minimal change disease (MCD) is the most common cause of nephrotic syndrome in children, accounting for 80-90% of cases. It is typically steroid-responsive and diagnosed clinically, as biopsy is rarely needed unless atypical features are present.

13. A patient of Nephrotic syndrome comes with complains of fever and productive cough for 5 days. There are crepts on right middle lung
zone.

What is the single most appropriate drug for him?

A. Amoxicillin

B. Ciprofloxacin

C. Cotrimoxazole

D. Doxycycline

E. Gentamycin

a. Patients with nephrotic syndrome are at higher risk of infections, particularly Streptococcus pneumoniae, due to loss of immunoglobulins in urine and impaired immune response. The presence of fever, productive cough, and crepitations in the right middle lung zone suggests pneumococcal pneumonia, for which amoxicillin is the first-line treatment according to guidelines.

14. A 10 years old boy is passing blood in his urine. You checked that his B.P. is increased and he is passing proteins in his urine. Two weeks back he had an acute infection in his ear. What is the most likely diagnosis?

A. Acute Pyelonephritis

B. Acute renal failure

C. Acute Tubular Necrosis

D. Nephritic syndrome

E. Nephrotic syndrome

d. This 10-year-old boy has hematuria, hypertension, and proteinuria following a recent ear infection (likely streptococcal pharyngitis or otitis media), which is characteristic of post-streptococcal glomerulonephritis (PSGN)—a common cause of nephritic syndrome in children. It typically occurs 1-3 weeks after a streptococcal infection and presents with red or cola-colored urine, edema, and hypertension.

15. A 50 years old man comes with blood in urine. His labs show:
Creatinine: 1.1 mg/dl
Urinalysis:
RBC +++, WBC 1-2
Ultrasound: Normal kidneys, bladder and prostate. What is the most appropriate next diagnostic step?

A. Cystoscopy

B. CT Pyelogram

C. Intravenous urogram

D. Isotope scan

E. PSA levels

b. CT Pyelogram is a highly effective imaging technique for evaluating hematuria, especially for identifying upper urinary tract issues like urothelial cell carcinoma or kidney stones. Cystoscopy is used when When there is hematuria without infection or prior trauma; renal U/S/CT shows no etiology; and bladder sonography shows a mass for possible biopsy.

16. A 42 traffic constable comes complaining that his urine is frothy in the evening. He denies any other urinary symptom. His BP is 124/80 mm Hg. What is the single most appropriate test to diagnose his condition?
A.24 hours urinary proteins

B.Creatinine clearance

C. Early morning urinalysis

D.Urine creatinine levels

E. Urine culture and sensitivity

c. Postural (orthostatic) proteinuria - 2–5% adolescents; rare >30y. Proteinuria disappears on early-morning sample. No long-term effects. OHGP 5th Ed Page 409

17. Mother brings her child because he has a pale complexion. He is a known case of nephrotic syndrome. She says that she has tried different iron preparations with no success. What is the most likely cause for his anemia?
A. ↓production of erythropoietin

B. ↓Transferrin in his blood

C. Anemia of chronic disease

D. Decreased absorption of iron

E. Excessive loss of Iron in urine

b. In nephrotic syndrome, hypoalbuminemia leads to a reduction in transferrin, a protein that transports iron in the blood. This results in functional iron deficiency, causing anemia that does not respond well to oral iron therapy.

18. A 43 years old diabetic patient comes for follow up after 2 years. He HbA1 e is 8.5%. He is taking Metformin for his diabetes. What is the single most appropriate screening test for early diabetic nephropathy?
A. Creatinine clearance

B. Microalbuminurea

C. Serum creatinine

D. Ultrasound kidneys

E. Urine dipstick for proteins

b. The earliest marker of diabetic nephropathy is microalbuminuria (30-300 mg/day). It indicates glomerular damage before significant changes in serum creatinine or GFR occur.

19. Mr. Jalal, 72 years old presents with inability to pass urine and severe lower abdominal discomfort since 1 day. There is no fever or previous urinary symptoms. What is the most appropriate step in management?
A. Catherization

B. IM Diclofenac

C. IV furosemide

D. IV Hyosine

E. Oral Prazocin

a. This patient has acute urinary retention (AUR), a common condition in older men, often due to benign prostatic hyperplasia (BPH). The first-line management is immediate urethral catheterization to relieve bladder distension and discomfort.

20. A 65 years old man comes with frequency of urine, burning micturition and lower abdominal pain. His health is generally good. For how long will you treat this patient with Trimethoprim?

A. 10 days

B. 14 days

C. 21 days

D.3 days

E. 7 days

b. For complicated UTIs in men, NICE guidelines recommend a longer course (usually 14 days) of an appropriate antibiotic such as Trimethoprim or Ciprofloxacin, especially if prostatitis is suspected.

21. A 24 yrs old woman comes with pain in loin & slight blood in urine. She is having 102° F temperature with rigors & vomiting. What is the best treatment option for her?

A. Ciprofloxacin

B. Co-amoxiclav

C. Cotrimoxazole

D. Doxycycline

E. Nitrofurantoin

a. The patient has pyelonephritis, which requires empirical antibiotic therapy. According to the provided guideline, for mild cases, Ciprofloxacin 500 mg every 12 hours orally is a recommended option.

22. The Insurance Company has referred Mr. Arshad to you for a medical checkup. His urine report shows 10-12 pus cells per HPF. He is not having urinary symptoms. His repeat clean catch MSU specimen report is same and urine culture is negative. What is the most appropriate next step?

A Repeat tests after 6 weeks

B Antibiotic course for 2 weeks

C Reassurance and declare fit

D Refer to urologist

E Plain X-Ray abdomen and U/S

c. The patient has asymptomatic pyuria with a negative urine culture, which does not require antibiotics or further immediate investigations unless other risk factors are present. The best approach is to reassure the patient and declare him fit.

23. A young patient of 27 years comes to you that from the last few weeks, he is unable to perform sex with his wife because of loss of erection. On history, you came to know, he is using

some drugs for asthma and increased acidity. Which of the following drug is most likely responsible for his problem?
A Cimetedine

B Salbutamol

C Corticosteroid

D Montelukast

E Domperidone

a. Cimetidine is known to cause erectile dysfunction by acting as an anti-androgen and inhibiting testosterone metabolism.

24. 18 years old male presents with left sided scrotal swelling since 2 years. The swelling is soft, fluctuant, non tender and upper end is approachable. Testes are difficult to palpate separately from the swelling. What is the single most likely diagnosis?
A Hydrocoele

B Varicocoele

C Inguinal Hernia

D Epididymo-orchitis

E Epididymal cyst

a. A hydrocele presents as a soft, fluctuant, non-tender swelling with a palpable upper limit. It is typically transilluminable, and the testis may be difficult to palpate separately. Since the description fits these characteristics

25. 25 years male comes with the complaint of small testes. He is concerned that he might not have children because of small testes. He getting married next month. What is the single most important initial test?
A Semen analysis

B FSH & LH levels

C Serum Testosterone

D Scrotal ultrasound

E Testicular biopsy

a. The single most important initial test for a male concerned about fertility is semen analysis. It assesses sperm count, motility, and morphology, which are crucial for fertility evaluation. Hormonal tests (FSH, LH, testosterone) may be done later if semen analysis is abnormal.

26. 16 years old, uncircumcised boy comes with acute foreskin swelling of his penis & severe pain. His foreskin is impossible to be replaced back. What is the most likely diagnosis?
A. Balanitis

B. Paraphimosis

C. Peyronies disease

D. Phimosis

E. Priapism

b. Paraphimosis - Foreskin is retracted then (because of oedema) unable to be replaced. Commonly occurs in catheterized patients when the catheter is changed.

27. A 50 year diabetic patient is on the following medication: Metformin 1g TDS, Gliclazide 80 mg bd, Ramipril 5 mg daily, Atenolol 50 mg, Aspirin 75 mg daily. Her blood results show creatinine 1.9 mg/dl. Which of the following medications should be withdrawn?

A. Aspirin

B. Atenolol

C. Gliclazide

D. Metformin

E. Ramipril

d. Metformin should be withdrawn. Metformin is contraindicated in patients with significantly impaired renal function (eGFR <30 ml/min) due to the risk of lactic acidosis. With a creatinine of 1.9 mg/dl, renal function is likely reduced, making Metformin unsafe.

28. A 28 years old man rushes into your clinic with 1 hour history of severe right lumber pain. On examination he is moaning with pain. Which analgesic will you give as first line in general practice?

A. Diclofenac

B. Hyosine

C. Nalbufen

D. Pentazocin

E. Tramadol

a. Stones usually pass spontaneously. Give pain relief (diclofenac 75mg IM/100mg PR) ± antiemetic. Consider admission to hospital if: Fever, Oliguria, Poor intake of fluid, Pregnant, Lives alone, Uncertain diagnosis, Analgesia ineffective/short-lived, Symptoms >24h

29. Mr. Smith presents to your clinic with his X- rays which show a 2 cm long stone in upper part of right ureter. He asks your advice about the best treatment for this stone. What would you advise him?

A. Drink excessive fluid

B. lithotripsy

C. Open surgery

D. Per cutoneous nephrolithotomy

E. Ureterolithotomy

b. Extracorporeal Shock Wave Lithotripsy (ESWL) is the preferred treatment for upper ureteric stones ≤2 cm if there are no contraindications. It is non-invasive, effective, and avoids the risks of surgery. However, if ESWL fails or the stone is too hard, ureteroscopy with laser lithotripsy may be considered.

30. A 27 yrs old newly married man presents with early ejaculation as soon as he starts intercourse, His erection is normal. His relation with wife is getting tense. What is the single most appropriate initial treatment?

A. Cap Fluoxetine

B. Intracavernosal injection

C. Reassurance

D. Tab Sildenafil

E. Testosterone Inj

a. Selective serotonin reuptake inhibitors (SSRIs), like Fluoxetine, are the first-line treatment for premature ejaculation as they delay ejaculation by increasing serotonin levels. Behavioral therapy and counseling can also help, but medication provides immediate relief. Sildenafil is for erectile dysfunction, which is not the issue here.

31. A 53 yrs old diabetic patient presents with gradual loss of erection since 5 yrs. There are no early morning erections. What is the single best initial treatment for him?

A. Cap Fluoxetene

B. Introcavernosal injection

C. Tab Sildenafil

D. Testosterone Inj

E. Vacuum pumps

c. Phosphodiesterase-5 inhibitors (e.g., Sildenafil) are the first-line treatment for erectile dysfunction (ED), especially in diabetic patients, as they improve blood flow to the penile tissue. Lack of morning erections suggests organic ED rather than psychological causes. Testosterone is only used if there's hypogonadism, and intracavernosal injections or vacuum pumps are second-line options.

32. A 30 years old man presents with primary infertility since 2 yrs. His medical history is insignificant. His physical exam appears normal. His semen analysis shows:

PH	7.8
Volume	3 cc (2-6 cc)
Semen count	10 million/cm3
Activity:	
Motile	20%
Sluggish	50%
Non motile	30%
Shape:	
Normal	80%
Abnormal	20%
WBC	0-1
RBC	0-1

What is the most appropriate next step?

A. Repeat semen analysis

B. Tab ciprofloxacin

C. Testicular biopsy

D. Testosterone Inj

E. Ultrasound Scrotum

a. Semen analysis should be repeated after 3 months to confirm oligoasthenospermia (low count and motility), as sperm parameters can fluctuate. A single abnormal test is not diagnostic of infertility. Testicular biopsy is only needed for azoospermia. Ciprofloxacin is unnecessary without infection. Testosterone may worsen spermatogenesis. Scrotal ultrasound can be considered later if varicocele is suspected.

33. A 21 yrs old man presents with sudden severe right sided groin pain which started when he was riding bicycle 1 hour ago. His right testis is tender & swollen.
Eye. What is the single most appropriate initial step?
A. Ceftriaxone + Doxycycline

B. Cold compresses

C. Immediate referral

D. Symptomatic treatment

E. Ultrasound of Scrotum

c. The presentation suggests testicular torsion, which is a surgical emergency requiring urgent detorsion and orchiopexy within 6 hours to save the testis. Delay can lead to testicular infarction and necrosis. Ultrasound may confirm the diagnosis, but it should not delay surgical intervention. Antibiotics are for epididymo-orchitis, which usually has a gradual onset. Cold compresses and symptomatic treatment are inappropriate as they do not address the underlying torsion.

PAEDIATRICS

1. Mother of 10 days old child comes to ask about which milk is beneficial to child. She doesn't want to breast feed her child because her elder child was not healthy on mother's milk. Which one of the following statements regarding breast milk is true?

A. Increase risk of diarrhea

B. Increases obesity of mother

C. Increases risk of breast Ca

D. Reduces mother baby bonding

E. Reduces respiratory infection

e. Breast milk provides essential antibodies and immune factors that help protect infants from respiratory infections, gastrointestinal infections, and other illnesses. It supports optimal growth and development, making it the best choice for infants unless contraindicated.

2. Mother of 2 weeks old child comes to ask about vitamin supplement for child. The baby is on breast milk. Which of the following vitamin supplement would you advise at this age?

A. None

B. Vit A

C. Vit B

D. Vit D

d. Breast milk has low levels of vitamin K, D, and iron, ensure babies who have had oral vitamin K at birth receive additional vitamin K supplements, Encourage weaning at 6mo, Vitamin D supplements (8.5–10 micrograms/d) are recommended for breastfed babies, Iron drops can be given to babies with low iron reserves (e.g. low birthweight, maternal anaemia). OHGP 5th Ed Page 849

3. A working mother comes to shift her baby on fresh cow's milk as she wants to resume her job. What is minimum age when she can start cow's milk?

A. 6 month

B. 9 month

C. 12 month

D. 15 month

E. 18 month

c. Unmodified cow's milk Not recommended until the baby is >1y old as less digestible and contains little iron. OHGP 5th Ed Page 848

4. Mother of 3 months old child complains that her child has had diarrhea for 3 days. The baby is on breast feeding. Mother has started giving banana and yogurt to the child since 4 days. The baby weighs 6 Kg. You suggest that this diet is responsible for the current problem. Which is the appropriate age to introduce solids?

A. 4 month of age

B. 6 month of age

C. 8 month of age

D. 10month of age

E. 12 month of age

b. According to NICE guidelines, solids should be introduced at around 6 months. Introducing solids before 4-month scan lead to digestive issues, increased infection risk, and food intolerance. Until 6 months, babies should be exclusively breastfed or given formula milk for optimal nutrition.

5. On routine examination of 2 months old child you found that his right testis has not descended yet. Otherwise child is normal. What will you advise his parents?

A. Urgent surgical referral

B. Wait till age of 6 months.

C. Wait till age of 9 months

D. Wait till age of 12 months

E. Wait till age of 24 months

d. Affects 2–3% of neonates—but most descend during the 1st year. Refer those that do not for surgical descent/fixation to avoid ↑ risk of malignancy and later infertility. OHGP 5th Ed Page 443

6. A 8 month old child has swelling in belly button area since birth. Now this swelling is increased in size for 5 days. What will you tell the parents regarding this swelling?

A. Urgent surgical referral

B. Wait till age of 12 months

C. Wait till age of 15 months

D. Wait till age of 18 months

E. Wait till age of 24 months

e. Umbilical Hernia – Common. Presents as a bulge at the umbilicus. Painless and reducible, but more prominent when the baby cries. Due to a defect in the umbilical ring when the cord separates. More common in people of black ethnic origin, premature and low birthweight babies, and associated with certain syndromes (e.g. trisomy 13 and 18 or 21). Usually resolves spontaneously. Strangulation is rare. Refer for surgery if an umbilical hernia persists until >4y of age. OHGP 5th Ed Page 868

7. New born baby presents in emergency room with complain of delay in passing meconium, abdominal distension and repeated vomiting. His anal examination appears normal What will the most appropriate diagnostic test?

A. Barium enema

B. CT abdomen

C. Rectal biopsy

D. Sigmoidoscopy

E. X-ray abdomen

c. Caused by absence of the ganglion cells of the myenteric plexus in the distal bowel. Presents with delay in passing meconium, abdominal distension, vomiting, and poor feeding in a neonate. If only a short segment is affected, presentation may be much later with chronic constipation. Diagnosis is confirmed with rectal biopsy. Refer to surgery. Treatment is surgical removal of the affected area of bowel. OHGP 5th Ed Page 373

8. 2 years old child comes with cough and fever since 2 days. His weight is 13 Kg, temperature is 101°F and respiratory rate is 30 per minute. There is a soft early systolic murmur. First and second heart sounds are normal. What is most likely cause of murmur?

A. Atrial Septal Defect

B. Innocent murmur

C. Patent Ductus Arteriosus

D. Pulmonary stenosis

E. Ventricular Septal Defect

b. Innocent (physiological) murmurs are soft, early systolic, and do not have abnormal heart sounds. They are common in children, especially during febrile illnesses, due to increased cardiac output. The presence of a normal S1 and S2 without other signs of heart disease suggests a benign murmur that usually resolves with time.

HEART MURMURS

Left-to-Right Shunt	**Acyanotic**	ASD, VSD, PDA
Right-to-Left Shunt	**Cyanotic**	TOF, TGA

9. A newborn baby develops cyanosis soon after birth which is rapidly increasing. With no murmur. What is the most likely diagnosis?

A. Fallot's tetralogy

B. Hypo plastic left heart

C. Patent Ductus Arteriosus

D. Transposition of great vessels

E. Coarctation of aorta

d. Cyanosis soon after birth without a murmur is most likely due to Transposition of the Great Vessels (TGA). It is a cyanotic congenital heart defect where the aorta arises from the right ventricle and the pulmonary artery from the left ventricle, leading to severe hypoxemia. Immediate intervention, such as prostaglandin E1 to maintain ductal patency, is required.

10. 2 years boy presents with vomiting for last 1 day. He vomited 1/3 of previous 2 feeds. He has wet 5 nappies in last 24 hours. His respiratory rate is 28 per minute normal, temp 99 °F. What is most appropriate management?

A. IV ringer 200cc

B. Inj. Ceftriaxone

C. Reassurance

D. Refer urgently

E. Serum electrolytes

c. According to NICE guidelines, this child shows no signs of dehydration or serious illness (normal urine output, respiratory rate, and temperature). The vomiting is mild and likely self-limiting. Reassurance and monitoring are appropriate, along with ensuring adequate oral hydration and feeding. Further investigation is unnecessary unless symptoms worsen.

11. 4 years old child has been brought by father with history of recurrent upper respiratory tract infection 5 times a year since last 2 years. He is worried that his child might have some

serious disease. His ear, throat and urine test are normal. His weight is 18 Kg. What is the single most appropriate step in management?

A. CBC

B. CXR

C. Reassure

D. Referral

E. Spirometry

c. According to NICE guidelines, recurrent upper respiratory tract infections (URTIs) are common in young children due to developing immunity. The child's normal weight, ear, throat, and urine findings suggest no serious underlying condition. Reassurance and advice on supportive care (e.g., hydration, hygiene) are appropriate. Further investigations are unnecessary unless there are red flags.

12. 9 month old baby presents to you with difficulty in feeding because of cough, runny nose and fever since 2 days. There are bilateral crepitations over lung fields and his temp is 99.6°F.

What treatment will you advise to this patient?

A. Amoxicillin

B. Clarithromycin

C. Pheniramine

D. Paracetamol

E. Prednisolone

d. According to NICE guidelines, a 9-month-old with cough, runny nose, fever, and bilateral crepitations likely has pneumonia or lower respiratory tract infection (LRTI). The first-line antibiotic for bacterial pneumonia in this age group is Amoxicillin. Supportive care, including fluids and monitoring, should also be provided. Here no indication of Antibiotics.

13. 3 $^{1/2}$ years old child presents with runny nose, watery eyes and fever. He has harsh and noisy breathing and a barking cough. His temp is 99.6°F, respiratory rate is 24 per minute. What is the single best treatment for child?

A. Amoxicillin

B. Clarithromycin

C. Paracetamol

D. Steam inhalation

E. Salbutamol nebulization

d. Croup. Steam inhalation. Single dose Dexamethasone at 0.15mg/kg can be given after that. OHGP 5th Ed Page 915

14. 6 month old girl presents with vomiting and fever since 1 week. Her temp is 101°F and rest of physical examination is normal. What will be the most appropriate cause?

A. Abdominal lymphadenopathy

B. Gastroenteritis

C. Hepatitis

D. Pneumonia

E. Urinary tract infection

e. UTI is a common cause of fever and vomiting in infants with an otherwise normal physical examination. UTIs should always be suspected in children under 1 year with nonspecific symptoms like fever and vomiting. A urine sample should be obtained for diagnosis.

15. 4 years old child comes with painful micturition, repeatedly passing urine and red color urine for 3 days. O/E temp-100˚F and R/R-30/min. What will be the most appropriate step in treatment?

A. Urinalysis and culture/sensitivity

B. Culture/sensitivity and Trimethoprim

C. Urinalysis and Trimethoprim

D. Urinalysis, culture/sensitivity and Nalidixic acid

E. Urinalysis, culture/sensitivity and Trimethoprim

e. A child presenting with symptoms of UTI (painful micturition, frequent urination, red urine, and fever) requires urinalysis to confirm the infection and a culture with sensitivity to identify the causative organism. Empirical antibiotic therapy, such as Trimethoprim, should be initiated promptly while awaiting culture results to prevent complications like renal scarring or sepsis.

16. 10 month old child comes with post treatment urine report. Report is clear. With USG which test you advise to check vesicoureteral reflux?

A. Cystoscopy

B. CT scan

C. IVP

D. DMSA scan

E. MCUG

e. A Micturating Cystourethrogram (MCUG) is the preferred investigation to diagnose vesicoureteral reflux (VUR), particularly in infants with recurrent UTIs or abnormal ultrasound findings. It visualizes urinary flow during micturition and detects reflux from the bladder to the ureters and kidneys.

17. 4 years old boy comes with red watery eyes and fever for 10 days which is not responding to antibiotics and antipyretics. His lips are dry and cracked, palms and soles are reddened There are painful nodules on hands and tender right sided lymphadenopathy.

What is the most likely diagnosis?

A. Glandular fever

B. Kawasaki's disease

C. Leptospirosis

D. Measles

E. Scarlet fever

b. Kawasaki's disease - Predominantly affects children <5y, Cause unknown, Diagnosis: diseases with similar presentations have been excluded and ≥5 of:

- Fever for ≥5d
- Bilateral conjunctivitis
- Polymorphous rash
- Changes in lips/mouth—red, dry, or cracked lips; strawberry tongue; diffuse redness of mucosa
- Changes in extremities: reddening of palms/soles; oedema of hands/feet; peeling of skin of hands, feet, and/or groin
- Cervical lymphadenopathy >15mm diameter (usually single and painful)

↓ suspicion if poor response to antipyretics
If suspected refer for urgent paediatric assessment
Early treatment (<10d after onset) with IVimmunoglobulin and aspirin ↓ incidence and severity of aneurysm formation as well as giving symptom relief
Complications: Coronary arteritis with formation of aneurysms; accelerated atherosclerosis. OHGP 5th Ed Page 501

18. A mother brings her 5 years old child saying that he is always constipated. Child passes stool after three days without any straining. What will the most appropriate step in management?

A. Glycerin suppositories

B. Lactulose syrup

C. Ispaghula husk

D. Micro enema

E. Reassurance

b. This patient has no constipation, therefore, reassurance is the right option

CONSTIPATION DIAGNOSIS AND RED FLAGS (NICE GUIDELINES)

Diagnostic Criteria for Constipation (≥2 of the following)

Criteria	Notes
<3 stool per week	Except breastfed babies >6wk
Hard, large, or rabbit-dropping stool	-
Overflow soiling	Children >1y
Distress on stooling or anal pain	-
Bleeding associated with hard stool	-
Straining Poor appetite or abdominal pain that improves after stool passed	- -
Posture indicating retaining stool	Straight legs, back arch, tiptoe
History of previous constipation or anal fissure	-

Red Flags

Red Flags	
Symptoms that commence from birth or in the first few weeks	**Referral**
Failure or delay (>first 48 hours at term) in passing meconium	
Ribbon stools, leg weakness or locomotor delay	
Abdominal distension with vomiting	
Abnormal examination findings including: ○ Abnormal appearance of anus ○ Gross abdominal distension ○ Abnormal gluteal muscles, scoliosis, sacral agenesis, discoloured skin, naevi or sinus, hairy patch, or central pit	

○ Lower limb deformity including talipes ○ Abnormal lower limb reflexes or neuromuscular signs unexplained by existing conditions	
Abnormal reflexes	

Management

Principles of management for primary care

- Diagnose if serious underlying causes have been excluded.
- Advise about balanced diet and adequate fluid intake. Don’t use alone.
- Use a macrogol as first- line laxative adjusting dose according to response.
- Add a stimulant laxative if ineffective. If macrogols are not tolerated use
- a stimulant ± alternative softener.
- Continue medication for several weeks after regular bowel habit has been established.
  Refer for specialist assessment if not responding to treatment in ≤3mo (≤1mo if <1y old).

19. 5 years old child comes with complain of painless blood in stool, which is not mixed with stool. The child is otherwise healthy. What is the most likely cause of his rectal bleeding?

A. Constipation

B. Threadworm

C. Meckel's diverticulum

D. Anal fissure

E. Rectal polyp

e. Rectal polyps, particularly juvenile polyps, are common in children aged 2 to 6 years and can also cause painless rectal bleeding. Meckel's diverticulum typically presents before the age of 2

20. 5 month old child presents with diarrhea and vomiting since birth. She says that he passes mustard grain stool and vomits small amount of milk infrequently. His weight is 7 Kg. What is the single best option in management?

A. Reassurance

B. Rehydration salt

C. Referral

D. Stool culture

E. Metronidazole

a. A 5-month-old with persistent diarrhea and vomiting with normal weight for age needs reassurance.

21. Child of 14 months old comes with diarrhea started after fresh cow's milk ingestion. You advise Soya protein based formula milk. What advice will you give to parents regarding this formula?

A. Can continue till 5 years

B. It protects from intestinal infections

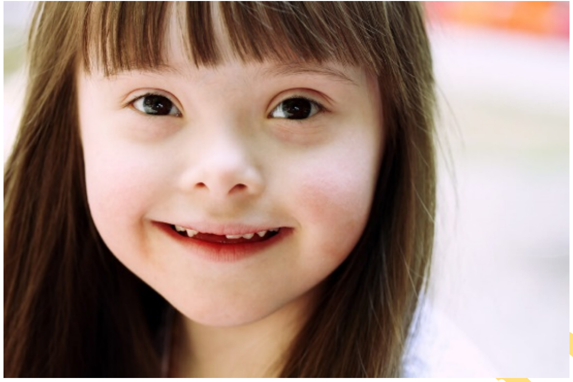
C. It causes allergy in most children

D. Can damage teeth on long term use

E. More useful then other formulas

d. Soya-based formula is sometimes used in cow’s milk protein allergy or lactose intolerance, but long-term use can increase the risk of dental caries due to high sugar content. It is generally not recommended for routine infant feeding, especially in children under 6 months, due to concerns about phytoestrogens.

22. What is the most probable diagnosis in this child?



A. Down's syndrome

B. Edward syndrome

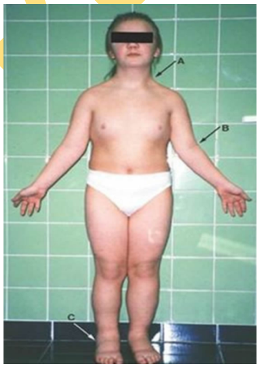
C. Patau's syndrome

D. Turner's syndrome

E. Klinefelter's syndrome

a. Down Syndrome

23. What is the most probable diagnosis in this child



A. Down's syndrome

B. Edward syndrome

C. Patau's syndrome

D. Turner's syndrome

E. Klinefelter's syndrome

d. Turner’s Syndrome

24. 1 year old girl comes with vomiting and moderate crying. Her feed has reduced to ½ in previous 24 hrs. She vomits half of last 3 feeds She is taking sips of plain water repeatedly. Her

temp-102˚F and slight bulging of anterior fontanel. What will the most appropriate next step in management?

A. IV acyclovir

B. IV mannitol

C. I/v ringer lactate

D. Inj. Ceftriaxone

E. IV diphenhydramine

d. A 1-year-old with fever (102°F), vomiting, reduced feeding, and bulging anterior fontanelle suggests bacterial meningitis. IV Ceftriaxone is the first-line empirical antibiotic for suspected bacterial meningitis in children over 3 months of age. IV acyclovir is used for viral encephalitis, and IV mannitol is for raised intracranial pressure, but neither are first-line in this case.

25. A 3 years old boy has been brought by mother who had not started walking. He was on bread, rice, potatoes. His palms were pale, hairs are brown with white lines, he looks puffy, and pedal and sacral edema are present. He looks apathic and lethargic.

What would be the best management in this case?

A. Refer to hospital for admission

B. Start feeding through N/G tube at home

C. Treat with high protein diet at home

D. IV antibiotic and high protein diet at home

E. High protein diet under observation at clinic

a. This child presents with severe protein-energy malnutrition (Kwashiorkor), indicated by edema, apathy, lethargy, pale palms, and hair changes. Immediate hospital admission is required for nutritional rehabilitation, infection control, and careful refeeding to prevent refeeding syndrome. Home-based management is not appropriate due to the risk of electrolyte imbalance and complications.

26. A 2 months old child has been brought by mother saying that he cries a lot. He was born normally, taking breast feed and small amount of top feed at night. He is passing 5 stools per day and throws a small amount of milk after feeding.

What is the most likely pathophysiology of his condition?

A. Bottle feeding

B. Hormone abnormalities

C. Gastrointestinal hyperperistalsis

D. Unrealistic maternal expectations

E. The cause of symptoms is unknown

e. Excessive crying in an otherwise healthy 2-month-old infant is most likely infantile colic, which has no known cause. It is a self-limiting condition characterized by crying episodes lasting >3 hours/day, >3 days/week, for >3 weeks. Management includes parental reassurance, soothing techniques, and feeding assessment, as symptoms typically resolve by 3–4 months of age. OHGP 5th Ed Page 842

27. A 2-month-old infant is brought by his mother because he is crying since half an hour. On examination, the infant is crying inconsolably and has a swollen, bruised right arm. An x-ray reveals a spiral fracture of the right humerus There are few old bruises that appear to be in various stages of healing. What is most likely diagnosis?

A. Child Abuse

B. Child Neglect

C. Coagulopathy

D. Fall from a height

E. Lymphoproliferative disorder

a. Spiral fractures in non-mobile infants, multiple bruises in various stages of healing, and inconsolable crying are highly suspicious for non-accidental injury (child abuse). Urgent safeguarding measures, including hospital admission, full skeletal survey, and child protection referral, are necessary. Accidental falls in infants rarely cause spiral fractures.

28. A 8 years old boy presents with 5 days history of fever, cough and hemoptysis. There is dullness and bronchial breathing on right middle lung field.

Which one of the following is the most likely cause?

A. Blunt trauma

B. Bronchiectasis

C. Foreign body aspiration

D. Pneumonia

E. Tuberculosis

d. A child with fever, cough, hemoptysis, dullness to percussion, and bronchial breathing is most likely to have pneumonia with lung consolidation. The right middle lung field involvement suggests bacterial pneumonia (e.g., Streptococcus pneumoniae). Chest X-ray and antibiotics (e.g., Amoxicillin) are recommended for management.

29. A 10 years old girl presents with 3 weeks history of weakness, shortness of breath, generalized swelling and puffy eyes. There are no urinary complaints.

Which of the following is the most likely cause?

A. Minimal change nephrotic syndrome

B. Membranous nephropathy

C. Cor pulmonale secondary to valvular disease

D. Poststreptococcal glomerulonephritis

E. Congestive cardiac failure

a. A 10-year-old with generalized swelling, puffy eyes, weakness, and no urinary symptoms suggests Nephrotic Syndrome, most commonly Minimal Change Disease (MCD) in children. MCD presents with proteinuria, hypoalbuminemia, and edema without significant hematuria. First-line treatment is corticosteroids (Prednisolone), with a good prognosis.

30. A 4 years old girl presents with UTI for the third time in last 1 year. What is the most likely cause of recurrent UTI in her case?

A. Congenital anomaly

B. Polycystic kidneys

C. Renal stones

D. Vesicoureteral reflux

E. Wilms' tumor

d. Recurrent UTIs in a young child (especially females) are commonly caused by Vesicoureteral Reflux (VUR), a congenital abnormality where urine flows backward from the bladder to the ureters/kidneys, increasing the risk of infections and renal scarring. MCUG (Micturating Cystourethrogram) is the diagnostic test of choice.

31. 8 years boy present with pain in hip joint which increases on standing for the last 3 days. The child has a mild limp. There is no history of trauma. Movements of hip joint are normal. What is the most probable diagnosis?

A. Perth's disease

B. Septic arthritis of hip

C. Slipped femoral epiplysis

D. Still's disease

E. Transient synovitis of hip

e. Transient synovitis of hip - The most common reason for limping in childhood. *Peak age*: 2–10y. The child is usually well but complains of pain in the hip or knee and may refuse to weight bear. Often occurs after a viral infection. Cause is unknown. Exclude septic arthritis—refer to orthopaedics. Usually resolves in 7–10d without treatment. OHGP 5th Ed Page 465

32. 7 years old boy presents with painful right hip joint & limp for last one month. There is no fever or trauma. Movements of right hip joint are limited. Rest of the exam is normal. What is the most likely diagnosis?

A. Juvenile chronic Arthritis

B. Perthes disease

C. Septic hip

D. Slipped femoral epiphysis

E. Transient synovitis of hip

b. Perthes disease - Pain in the hip or knee, limp, and limited hip movement developing over 1mo. Due to avascular necrosis of the femoral head. Bilateral in 10%. *Peak age*: 4–7y (range 3–11y). OHGP 5th Ed Page 465

33. Parents of a boy diagnosed as Perthes disease come to discuss the prognosis. Which one of the following has a good prognosis?

A. Female gender

B. Involvement of whole femoral head

C. Lateral displacement of head

D. Onset less than 8 year

E. Pronounced metaphysical rarefaction

d. Perthes disease has a better prognosis when diagnosed before age 8 because younger children have a greater ability for bone remodeling and recovery. Poor prognostic factors include female gender, whole femoral head involvement, lateral displacement, and metaphyseal rarefaction, which indicate more severe joint damage and worse outcomes. If suspected refer for X-ray and to orthopaedics. Risk factors for poor outcome include:

- Onset >8y
- Female gender
- Involvement of the whole femoral head
- Pronounced metaphyseal rarefaction
- Lateral displacement of the femoral head. OHGP 5th Ed Page 465

34. 15 years tall thin boy presents with painful left hip & thigh. There is a limp & decreased left hip movement. Affected leg is shortened and externally rotated.

What is the most appropriate initial diagnostic test in this case?

A. Bone scan

B. C.T Scan

C. E.S.R

D. M.R.I

E. X-ray

e. The upper femoral epiphysis slips with respect to the femur, usually in a postero-inferior direction. Bilateral in 20%. Incidence: 1:100,000. Peak age: 10–15y. Pain at rest in the groin, hip, thigh or referred to the knee; limp and/or pain on movement; ↓ hip movements—particularly abduction and medial rotation. The affected leg may be externally rotated and shortened. Confirm diagnosis on X-ray (include lateral views)—shows backwards and downwards slippage of the epiphysis. Refer to orthopaedics—surgical pinning or reconstructive surgery is needed. Monitoring of the other hip is essential. Complications include: avascular necrosis; coxa vara; early OA; slipped epiphysis on the contralateral side. OHGP 5th Ed Page 465

35. A 10 years old girl has been brought by parents saying that her height is shorter than her cousins who are of her age. Height of mother & Father is 160 & 180 cm respectively.

What is the expected adult height of the girl?

A. 160 cm

B. 164 cm

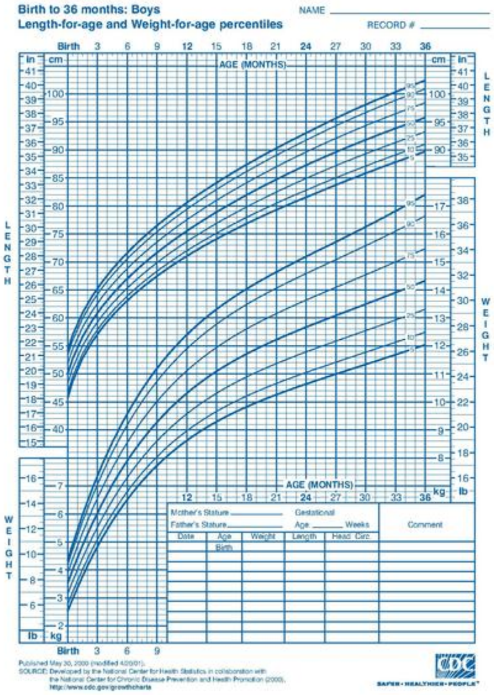
C. 168 cm

D. 170 cm

E. 176 cm

b. Add Father + Mother height and take average of it.
For Girls – Minus 6
For Boys – Plus 6

36. Parents present with their 10 years old girl whose height is 148 cm. Which one of the following is the most unlikely cause of her current height?



Published May 30, 2000 (modified 4/20/01).
SOURCE: Developed by the National Center for Health Statistics in collaboration with the National Center for Chronic Disease Prevention and Health Promotion (2000).
http://www.cdc.gov/growthcharts

A. Marfan syndrome

B. Pituitary adenoma

C. Precocious puberty

D. Thyrotoxicosis

E. Turners syndrome

e. Turner's Syndrome is associated with short stature, not tall stature. A 10-year-old girl with a height of 148 cm is more likely to have Marfan Syndrome (connective tissue disorder), Pituitary Adenoma (excess GH causing gigantism), Precocious Puberty (early growth acceleration), or Thyrotoxicosis (hyperthyroidism stimulating growth). Turner's Syndrome (45,XO) typically presents with short stature, webbed neck, and gonadal dysgenesis.

37. 10 year old boy presents with frequent sudden awakening with screaming for the last 5 years. In the morning, he forgets the night event. What is the most appropriate step?

A. Reassure

B. Refer to Neurologist

C. Refer to Psychiatrist

D. Refer to psychologist

E. Wakening before the event

b. Night terrors - Sudden awakening with inconsolable panic and screaming. Usually occurs in the first 1–3h of sleep. Episodes last seconds → minutes. Features:

- Blank or confused stares
- Incomplete arousal with poor responsiveness to people

- Amnesia for the episode

Night terrors are most common in children aged 3–8y and require no treatment apart from simple reassurance. Advise parents not to wake the child as this ↑ the disturbance. If frequent consider waking the child before episodes occur and keeping the child awake for a few minutes to break the cycle. If the terrors persist beyond 8y, consider a diagnosis of temporal lobe epilepsy. OHGP 5th Ed Page 891

38. A 5 years old boy has been brought by parents saying that he still wets his bed at night.

What is the single most appropriate advice at this stage?

A. Counseling

B. Desmopressin

C. Enuresis Alarm

D. Reassurance

E. Refer to school nurse

d. Bedwetting (nocturnal enuresis) is common in children under 5 years and often resolves naturally. Reassurance is the first-line management for a 5-year-old with no signs of underlying pathology. Enuresis alarms or Desmopressin are considered only in children ≥7 years if bedwetting persists. Counseling and school nurse referral are unnecessary at this stage unless there are additional concerns (e.g., daytime wetting, urinary symptoms). OHGP 5th Ed Page 892

39. A 10 year girl presents with colicky peri umbilical pain off and on since last 2 months. She refuses to go to school due to this pain. Her physical exam is normal.

What is the most likely diagnosis?

A. Abdominal migraine

B. Functional abdominal pain

C. Giardiasis

D. Meckel's diverticulum

E. Worm infestation

b. Functional abdominal pain is the most likely diagnosis in a child with recurrent peri-umbilical pain for >2 months and a normal physical exam. It is a common childhood disorder, often linked to school avoidance, anxiety, or stress, with no identifiable organic cause. Abdominal migraine is episodic and associated with nausea/vomiting, while Giardiasis, Meckel’s diverticulum, and worm infestation typically present with other gastrointestinal symptoms such as diarrhea or blood in stools.

40. A 7 years old boy has been brought for follow up of nocturnal enuresis. He is using Enuresis Alarm since last 6 months and is not wetting his bed any more.

When should Enuresis Alarm be withheld after cessation of bed wetting?

A. 1 Week

B. 2 Week

C. 3 Week

D. 4 Week

E. 5 Week

d. An alarm is triggered to wake the child when urine makes contact with a sensor. With time the child wakes in response to bladder contractions rather than the alarm
First-line treatment when advice/rewards fail. Usually some effect in <4wk but may take months until the child is completely dry at night. Continue until 2wk of dry nights—restart if relapses. OHGP 5th Ed Page 893

41. A 14 year boy feels unhappy at home & frustrated at school. He spends the day with the friends who have same feeling.

What is the most appropriate diagnosis?

A. ADHD

B. Autistism

C. Depression

D. School refusal

E. Truancy

e. Truancy refers to deliberate school avoidance without parental consent, often linked to unhappiness at home, frustration at school, and peer influence. Unlike school refusal, which is driven by anxiety or distress, truancy is more associated with defiant behavior and social influences. Depression, ADHD, and Autism would typically present with additional symptoms affecting multiple areas of life. OHGP 5th Ed Page 888

42. A 4 year boy presents with c/o waking up in the middle of night because of frightening dreams once in a month. He awakes up & recalls the detail of dreams.

What is the most appropriate step in management?

A. Behavior therapy

B. Imipramine

C. Reassurance

D. Referral

E. Sertraline

c. Nightmares in children are common and self-limiting, especially if they occur infrequently (once a month). Since the child fully wakes up and recalls the dream, this is typical of nightmares, not night terrors. Reassurance and a consistent bedtime routine are the best approach. Medication (Imipramine, Sertraline) and therapy are unnecessary unless nightmares are frequent, severe, or linked to trauma. OHGP 5th Ed Page 891

43. A 14 years old boy comes with a painless swelling on his right forearm since last 3 months. There is a 2 x2 cm soft, tender mobile mass on the anterior aspect of right forearm with normal overlying skin. What is the most appropriate step in management?

A. Excision biopsy

B. FNAC

C. Reassurance

D. Referral

E. X-ray

c. Lipoma – Should be reassured

44. A mother lost her son two years ago because of cot death. She has come with her newborn baby to seek advice to prevent cot death of her baby. Which advice is NOT correct for reducing risk in cot death?

A. Cover the baby's head while sleeping

B. Do not smoke in baby's room

C. Keep baby cot in parents' room for 6 months

D. Place baby on his back while sleeping

E. Seek medical advice for minor illness

a. Covering a baby's head while sleeping increases the risk of Sudden Infant Death Syndrome (SIDS) by causing overheating and accidental suffocation.
Correct SIDS prevention advice:

- Do not smoke in the baby's room.
- Keep the baby's cot in the parents' room for at least 6 months.
- Always place the baby on their back for sleep.
- Seek medical advice for minor illnesses as infections may increase SIDS risk. OHGP 5th Ed Page 904

45. A mother brings her 6 weeks child for checkup. He responds to sound and follows the moving object but the child does not pass any smile. At what age you would like to refer him?

A. 6 weeks

B. 8 weeks

C. 10 weeks

D. 18 weeks

E. 24 weeks

e. A social smile typically develops by 6 weeks of age. However, mild delays can be normal. A baby should be referred if there is no social smile by 10 weeks, as this could indicate neurodevelopmental disorders, visual impairment, or autism spectrum disorder. Earlier referral is considered if there are additional concerns.

46. 9 months old child is brought by his parents for general medical checkup. Which is the warning sign for this age?

A. No eruption of teeth

B. Positive distraction hearing test

C. Positive Moro reflex

D. Positive red reflex

E. Puts everything into month

c. The Moro reflex (startle reflex) should disappear by 4–6 months. If it is still present at 9 months, it is a warning sign of possible neurological impairment (e.g., cerebral palsy).

47. A 3 years old boy has been brought by his mother for developmental screening.

When will you refer this child?

A. Builds tower of only 8 blocks

B. Matches two colors only

FREE RESOU

C. Unable to draw animals

D. Unable to speak simple sentences

E. Unable to stand on one foot for 10 seconds

d. By 3 years of age, a child should be able to form simple sentences (e.g., "I want toy"). Failure to do so is a warning sign of speech and language delay, which may indicate developmental delay, hearing impairment, or autism spectrum disorder, requiring further assessment and referral.

48. A 6 weeks baby has been brought for routine checkup. He is asymptomatic. Barlow test is positive bilaterally. What is the single most appropriate step in management?

A. Physiotherapy

B. Reassurance

C. Splinting

D. Surgery

E. X-ray hips

b. A positive Barlow test at 6 weeks suggests Developmental Dysplasia of the Hip (DDH). The first-line treatment is splinting with a Pavlik harness, which helps maintain hip stability and promotes normal joint development. X-ray is not useful at this age as the femoral head is mostly cartilaginous; ultrasound is preferred for further assessment if needed.
If Ortolani Test is +ve – Refer for Xray, Bracing, Pavlik Harness/ Splinting, Surgery

49. A 6 years old child presents with lateral curvature of his spine with mild pain. Which of the following clinical feature indicates that this curvature is postural and of no clinical significance?

A. Curvature that disappears on bending

B. Presence of difference in shoulders height

C. Presence of gap between arm and waistline

D. Presence of thoracic or lumbar hump

E. Congenital malformations of spine

a. A postural scoliosis is non-structural and of no clinical significance, as the curvature disappears when the child bends forward. This distinguishes it from structural scoliosis, which remains fixed due to underlying spinal abnormalities. Structural scoliosis may present with shoulder height asymmetry, waist asymmetry, or rib humps, requiring further evaluation

50. 3 ½ years old child is brought by his father because he is unable to speak. His elder brother started speaking at the age of 2 years. What will be your most appropriate initial step in management?

A. Reassure and observe for 6 months

B. Send him to E.N.T. consultant

C. Send him to pediatrician

D. Send him to psychiatrist

E. Send him to speech therapist

b. Delayed speech development in a 3.5-year-old child requires an initial assessment for hearing impairment, which is a common cause of speech delay. The first step is to refer the child to an ENT specialist for hearing assessment and to rule out conditions like glue ear (otitis media with effusion). If hearing is normal, further evaluation by a speech therapist or pediatrician may be needed.

51. A 10 days old baby presents with an egg sized firm, well demarcated and tense lump on his left parietal region of skull that developed after delivery. He is also having slight anemia. What is your most probable diagnosis?

A. Caput succedaneum

B. Cephalhematoma

C. Depressed skull fracture

D. Intracranial hemorrhage

E. Parietal hemangioma

b. Cephalhematoma - Uncommon. Haemorrhage beneath the periosteum. Unilateral and usually parietal. Presents as a lump—the size of an egg—on the baby's head. Treatment is not required, but anaemia or hyperbilirubinaemia may follow. OHGP 5th Ed Page 838

52. Neonate is brought to your clinic after difficult labor because he cries when lifted. Which is the most common fracture he is likely to have?

A. Clavicle

B. Humerus

C. Radius

D. Ribs

E. Scapula

a. Clavicle fracture is the most common birth-related fracture, often due to shoulder dystocia or difficult labor. Affected neonates may cry when lifted due to pain and show asymmetry in arm movement. Most cases heal spontaneously with gentle handling and supportive care

53. A worried mother brings a nappy of his neonate which is blood stained. What will be your next step of management?

A. Bleeding profile

B. Reassurance

C. Stool analysis

D. Stool occult blood

E. Urgent referral

b. Common in the first few days of life. Usually due to urinary urates but may be due to blood from the cord or vagina (oestrogen withdrawal bleed). Reassure. OHGP 5th Ed Page 843

54. A mother of 4 ½ months old baby presents with repeated bouts of severe, inconsolable cry of her baby. During an attack, the baby's body becomes tense and rigid, face goes red and he draws up his knees. Examination is normal. How will you manage this case?

A. Advise her to try colic drops or gripe water

B. Change his cow's milk formula to fresh cow's milk

C. Change his cow's milk to Soya based formula

D. Reassure her that symptoms will reduce with time

E. Refer him to pediatrics for treatment

d. Colic - Common in newborns ≤3mo. Repeat bouts of intense, unstoppable crying, often in early evening. Body is tense/rigid, face red, and knees drawn up. Attributed to abdominal pain but no proof. Ask about general health, feeding, onset/duration of crying, parental response, relieving factors, and FH of allergy. Normal examination. Reassure that colic is common, usually no serious underlying cause, and the baby is not rejecting the parents. Holding the baby, gentle motion, white noise, or a warm bath may help. Consider a trial of hypoallergenic formula, colic drops do not help. Refer to paediatrics if Diagnosis is in doubt, Other symptoms or signs (e.g. faltering growth, severe eczema) or Fails to resolve by 12wk of age, Severe symptoms. OHGP 5th Ed Page 842

55. You are asked to see a neonate who is having a severe jaundice since first day of life. What will be most appropriate management plan?

A. Observe for 24 hours

B. Reassurance

C. Referral

D. Serum bilirubin

E. Sun light therapy

c. Refer any baby with visible jaundice in the first 24h immediately back to paediatrics to exclude pathological causes (usually haemolysis or infection) and for monitoring/possible treatment. OHGP 5th Ed Page 842

56. A mother brings her 3 weeks old premature baby with pallor, poor feeding and irritability. What is the most likely type of anemia in his case?

A. Aplastic anemia

B. Folic acid deficiency anemia

C. Hemolytic anemia

D. Iron deficiency anemia

E. Vitamin B 12 deficiency anemia

d. Preterm infants are at high risk of iron deficiency anemia due to low iron stores at birth and rapid postnatal growth. Symptoms such as pallor, poor feeding, and irritability are common. Routine iron supplementation is recommended for preterm babies to prevent anemia. Folic acid and vitamin B12 deficiencies are rare at this age, and aplastic or hemolytic anemia would typically present with additional findings like petechiae or jaundice. OHGP 5th Ed Page 846

57. A 2 years old boy has been brought by mother after an episode of jerky movements at home each lasting for 20 minutes. The jerky movements start from right arm and spread to entire body. The patient is confused and drowsy after the episode. The child is having a temperature of 100°F since 3 days.

What is the most likely diagnosis in this case?

A. Complex partial seizure.

B. Febrile seizure

C. Partial seizure

D. Temporal lobe epilepsy

E. Tonic clonic siezure.

b. A febrile seizure is the most likely diagnosis in a 2-year-old child with a fever (100°F) and generalized jerky movements. The focal onset (starting in the right arm and spreading) and postictal confusion suggest a complex febrile seizure, which lasts >15 minutes or has focal features. Febrile seizures are common between 6 months and 5 years, typically self-limiting, and managed with antipyretics and observation. Further evaluation is needed if seizures are recurrent, prolonged, or atypical

58. A seven-year-old boy develops a palpable, purpuric rash following an upper respiratory tract infection. He has colicky abdominal pain and arthralgia. Which one of the following is the most likely diagnosis?

A. Acute rheumatic fever.

B. Bechet's syndrome

C. Hemolytic Uremic Syndrome

D. Henoch-Schoenlein purpura.

E. Reactive arthritis.

d. Henoch-Schönlein Purpura (HSP) is the most likely diagnosis in a 7-year-old boy with a palpable purpuric rash, colicky abdominal pain, and arthralgia following a recent upper respiratory tract infection. HSP is an IgA-mediated small vessel vasculitis, commonly affecting children aged 3–10 years, and may also involve renal impairment (hematuria, proteinuria). Supportive care is the mainstay of treatment, with steroids used in severe cases.

59. A 10 years old boy has been brought by parent saying that he gets up and starts walking during sleep. Then he comes back to bed and goes to sleep again. In the morning, he can't recall Which one of the following techniques has been shown to be most effective in his case?

A. Antiepileptic medication

B. Family therapy

C. Individual therapy

D. Scheduled awakenings

E. Tranquilizing medication

d. Scheduled awakenings are the most effective technique for managing sleepwalking (somnambulism) in children. This involves waking the child 15–30 minutes before the usual sleepwalking episode to prevent it. Sleepwalking is common in children and usually resolves with age. Medication (antiepileptics, tranquilizers) and therapy are not first-line unless symptoms are severe or associated with other sleep disorders

60. A 6 years old child has been brought by parents saying that he has been wetting his bed since birth. He was born at 34 weeks of gestation and developed urinary tract infection when has 4 years old. His weight is 18 Kg and height is at 50th centile for his age. He is shy because of taunting by his cousins about bed wetting. His mother is very strict in toilet training. His elder brother also had similar problem.

Which one of the following is a strong determinant of his condition?

A. Delayed growth pattern

B. Exhibition of shy behavior

C. Family history of enuresis

D. History of urinary tract infection

E. Traumatic toilet training

c. Primary nocturnal enuresis (bedwetting since birth) has a strong genetic link, with a higher likelihood if a parent or sibling had a similar history. This child's family history of enuresis is the strongest determinant of his condition. Delayed growth, shyness, UTI history, or strict toilet training may contribute but are not as strong predictors as genetics. Most cases resolve with age, but behavioral interventions or enuresis alarms may help.

EMERGENCIES

1. A 21 years old woman has been brought by her family members after having ingested 20 tablets of Acetaminophen.

Which of the following is the most appropriate antidote?
A. Flumazenil

B. Naloxone

C. Vitamin K

D. N-acetylcysteine

E. Ethanol

d. Acetaminophen (Paracetamol) overdose can cause severe liver toxicity due to N-acetyl-p-benzoquinone imine (NAPQI) accumulation. N-acetylcysteine (NAC) is the specific antidote, as it replenishes glutathione, helping detoxify NAPQI and prevent liver failure.

- Flumazenil is for benzodiazepine overdose.
- Naloxone is for opioid toxicity.
- Vitamin K is for warfarin overdose.
- Ethanol is used in methanol/ethylene glycol poisoning, not paracetamol toxicity

2. A 20 years old male comes to you with sudden onset of right sided chest pain and dyspnea. His pulse is 98/min, BP is 100/70 mmHg. temperature 98.8° F and respiratory rate is 28/min. What is the single most likely diagnosis?

A. Pneumonia

B. Pneumothorax

C. Pleural effusion

D. Myocardial infarction

E. Pericarditis

b. A young male with sudden onset unilateral chest pain and dyspnea, along with tachypnea and normal temperature, strongly suggests spontaneous pneumothorax. It is common in tall, thin males or secondary to underlying lung disease.

3. A 17 year old boy is seen in the emergency. He has miosis and bronchospasm. He has sweating, excessive salivation and vomiting. His breath has a garlic odor.

What is the single most appropriate diagnosis?
A. Tricyclic poisoning

B. Organophosphate poisoning

C. Cyanide poisoning

D. Barbiturates poisoning

E. Cocaine poisoning

b. The most appropriate diagnosis is Organophosphate poisoning. Organophosphates inhibit acetylcholinesterase, leading to excessive cholinergic activity. Symptoms include miosis (pinpoint pupils), bronchospasm, sweating, excessive salivation, vomiting, and a characteristic garlic odor on breath. Treatment involves atropine and pralidoxime.

4. A 19 years old girl rushes into your clinic with complaints of weakness, sweating, generalized aches and breathlessness after a bee bite. What is the single most appropriate drug for her?

A. Chlorpheniramine

B. Epinephrine

C. Atropine

D. Hydrocortisone

E. Salbutamol

b. This patient is likely experiencing anaphylaxis following a bee sting, as indicated by weakness, sweating, generalized aches, and breathlessness. Epinephrine (IM, 0.5 mg in adults, 0.01 mg/kg in children) is the first-line treatment to counteract airway compromise, hypotension, and severe allergic reactions. Adjuncts like antihistamines (chlorpheniramine), corticosteroids (hydrocortisone), and bronchodilators (salbutamol) can be used after epinephrine.

5. A 17 years old girl is brought to your clinic after ingestion of 40 tablets of Lorazepam. She is non responsive, her BP is 100/60 mm Hg. pulse is 100 BPM, respiratory rate is 12 per minute.

What is the single most appropriate drug for her?

A. Naloxone

B. Doxapram

C. Charcoal

D. Flumazenil

E. Atropine

d. This patient has benzodiazepine overdose (Lorazepam ingestion) presenting with CNS depression, hypotension, and bradypnea. Flumazenil is a benzodiazepine receptor antagonist used as an antidote. However, it should be used with caution, especially in chronic benzodiazepine users, due to the risk of seizures. Supportive care, including airway protection and monitoring, is also essential.

6. A 24 years old woman comes to your clinic with acute onset of carpopedal spasm and circumoral paranesthesia after a quarrel with her husband.

What is the single most appropriate initial step in management?

A. Intravenous diazepam

B. Intramuscular Haloperidol

C. IV Calcium gluconate

D. Paper bag rebreathing

E. Psychotherapy

d. This patient likely has acute respiratory alkalosis due to hyperventilation syndrome, triggered by emotional distress. Symptoms like carpopedal spasm and circumoral paraesthesia occur due to hypocapnia-induced hypocalcemia. Rebreathing into a paper bag increases CO_2 levels, correcting alkalosis. IV calcium gluconate is used for hypocalcemia due to other causes, not respiratory alkalosis.

7. A 67 years old man presents with sudden onset of breathlessness and chest pain. One day ago the patient had traveled by air from Canada to Pakistan. Chest examination is normal.

What is the most likely diagnosis?
A. SARS Pneumonia

B. Tension Pneumothorax

C. Pulmonary edema

D. Pulmonary embolism

E. Myocardial infarction

d. This patient has sudden-onset breathlessness and chest pain after a long-haul flight, which is a major risk factor for deep vein thrombosis (DVT) and subsequent PE. A normal chest examination further supports this diagnosis.

8. You are hiking a mountain with your friends in Kaghan valley. One of your young friend from Karachi complains of severe weakness, shortness of breath and chest tightness. Which of the following is the most important treatment option?

A. Oxygen therapy

B. IV Furosemide

C. Hydrocortisone

D. Rest for 30 minutes

E. Immediate descent

e., This patient is experiencing high-altitude sickness (likely high-altitude pulmonary edema (HAPE) or high-altitude cerebral edema (HACE)) due to sudden exposure to high altitude in Kaghan Valley. Immediate descent to a lower altitude is the most effective and life-saving treatment.

9. A patient presents in emergency after being trapped in a house on fire. He has partial thickness burns over the entire anterior chest and abdomen, entire right arm and one half of the right leg. What is the estimated percentage of burn?

A. 18%

B. 27%

C. 36%

D. 45%

E. 54%

c. Using the Rule of Nines for burn estimation in adults:
- Anterior chest and abdomen = 18%
- Entire right arm = 9%
- Half of the right leg = 4.5%

Total burn percentage = 18% + 9% + 4.5% = 36%.

10. A 45 years old patient presents with repeated bleeding from nose. He has been taking furosemide, captopril and warfarin for the last one month. Which investigation will be helpful in reaching the diagnosis?

A. Hemoglobin

B. Christmas factor

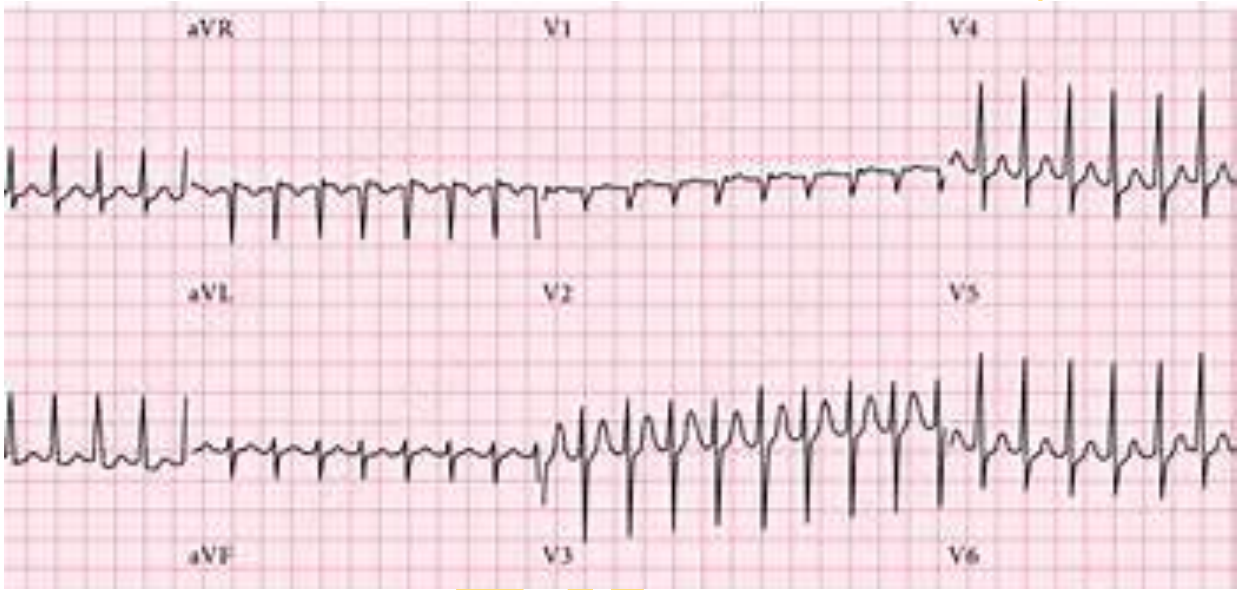
C. Platelet

D. PT

E. APTT

d. This patient is on warfarin, which affects the extrinsic coagulation pathway, prolonging PT/INR. Warfarin inhibits vitamin K-dependent clotting factors (II, VII, IX, X), leading to increased bleeding risk.

11. A 39 years old man has been brought to your clinic with severe palpitations. His pulse is 160/min and BP is 80/50 mm Hg. What is the single most appropriate management step?



A. Cardioversion

B. Carotid massage

C. Adenosine

D. Verapamil

E. Propranolol

a. This patient has supraventricular tachycardia (SVT) with hypotension (BP 80/50 mmHg), indicating hemodynamic instability. In unstable SVT, the immediate treatment is synchronized cardioversion (50-100J) to restore sinus rhythm.

12. A 39 years old man has been brought to your clinic with severe palpitations. His pulse is 160/min and BP is 100/60 mm Hg. His ECG shows supraventricular tachycardia. What will be your management step?

A. Cardioversion

B. Carotid massage

C. Adenosine

D. Verapamil

E. Propranolol

FREE RE

c. For stable supraventricular tachycardia (SVT) with a pulse, the first-line treatment is IV adenosine (6 mg rapid IV push, followed by 12 mg if needed) to terminate the arrhythmia. If adenosine is unavailable, verapamil can be used as an alternative. Carotid massage can be tried first if the patient is stable. Cardioversion is reserved for unstable patients (e.g., hypotension, altered mental status).

13. A 35 years old man sustained a stab wound in left chest. His pulse is 120/min, BP is 80/60 and neck veins are dilated. Trachea is central and heart sounds are muffled. What is the most likely diagnosis?

A. Pericardial tamponade

B. Myocardial contusion

C. Myocardial rupture

D. Aortic arch rupture

E. Tension pneumothorax

a. This patient has a stab wound to the chest with hypotension, tachycardia, distended neck veins, muffled heart sounds, and a central trachea, which is Beck's triad of cardiac tamponade. Blood accumulates in the pericardial sac, restricting cardiac filling and leading to obstructive shock. Immediate pericardiocentesis is lifesaving. Tension pneumothorax also causes hypotension and JVD but presents with a deviated trachea and absent breath sounds on the affected side.

14. A 25 years old man presents with two days history of oliguria, facial puffiness, ankle swelling and breathlessness. Four days back he sustained a severe electric shock. His urea is 120 mg/dl and serum creatinine 4.0 mg/dl. Which of the following investigations would help in reaching the diagnosis?

A. ALT

B. LDH

C. CPK

D. 24 Hr urinary proteins

E. Ultrasound KUB

c. This patient likely has acute kidney injury (AKI) due to rhabdomyolysis, secondary to severe electric shock. Rhabdomyolysis causes muscle breakdown, leading to myoglobinuria, oliguria, and renal impairment (elevated urea and creatinine). Serum CPK is the key marker for muscle injury, and its elevation confirms rhabdomyolysis. Management includes aggressive IV hydration and urine alkalinization.

15. A patient is given 10 mg of Haloperidol for his agitated behavior. After 30 minutes he develops stiffness of whole body and tongue protrusion.

Which of the following is the single most specific drug to control his symptoms?

A. Chlorpromazine

B. Procyclidine

C. Diazepam

D. Olanzapine

E. Phenobarbitone

b. This patient has acute dystonia, a type of extrapyramidal side effect (EPS) caused by Haloperidol. Symptoms include stiffness, muscle spasms, and tongue protrusion. Procyclidine, an anticholinergic, is the first-line treatment for acute dystonia. Other options like benzodiazepines (Diazepam) may help, but Procyclidine is more specific.

16. A 70 years old patient is brought in a confusional state. He is on multiple drugs. He looks lethargic; his skin is pale and cold to touch. His pulse is 50 BPM and respiratory rate is 10 per minute. His temperature is 94°F. Which one of his following drugs is likely to have contributed in his condition?

A. Nitrates

B. Atenolol

C. Aspirin

D. Clopidogrel

E. Bromazepam

e. Bromazepam is a benzodiazepine, and overdose or excessive sedation can cause CNS depression, confusion, lethargy, hypothermia, bradycardia, and respiratory depression—all seen in this patient. Elderly patients are more vulnerable due to reduced drug clearance. Management includes supportive care, airway protection if needed, and Flumazenil (benzodiazepine antagonist) in severe cases.

17. A patient has been brought to your clinic after having ingested a large amount of methylated spirit. The patient complains of nausea, vomiting and abdominal pain.

Which one of the following agent will you use as an antidote?
A. Ethyl alcohol

B. Ethylene glycol

C. Activated charcoal

D. Naloxone

E. Flumazenil

a. Methylated spirit contains methanol, which is toxic and metabolized to formic acid, causing metabolic acidosis, optic nerve damage, and CNS depression. Ethanol (ethyl alcohol) is the preferred antidote because it competes with methanol for alcohol dehydrogenase, preventing toxic metabolite formation. Fomepizole (not listed) is an alternative. Activated charcoal is ineffective, and Naloxone and Flumazenil are used for opioid and benzodiazepine toxicity, respectively.

18. An unrestrained car driver meets a low speed head on collision accident. The windshield of his car is broken.

Which is the commonest anticipated injury in this driver?
A. Dislocated hip

B. Fracture clavicle

C. Fracture sternum

D. Cervical fracture

E. Thoracic fracture

d. In a head-on collision without restraints, the driver's head forcefully strikes the windshield, leading to cervical spine fractures due to hyperflexion or hyperextension injuries. Whiplash injuries or more severe fractures (e.g., C1-C2 or lower cervical vertebrae) are common. Clavicle and sternal fractures are more typical in seatbelt injuries, and hip dislocation is more common in dashboard impact.

19. A 36 years labourer is brought to the emergency with hyperventilation, profuse sweating, subnormal temperature and hypotension. He has been working all the day in sun.
The most likely diagnosis is

A. Dehydration

B. Heat stroke

C. Heat exhaustion

D. Acute Coronary Syndrome

E. Fatigue

c. This patient has been working in the sun all day and presents with hyperventilation, profuse sweating, hypotension, and subnormal temperature, which are classic signs of heat exhaustion. Unlike heat stroke, where sweating stops and body temperature is very high, heat exhaustion features excessive sweating with a normal or slightly low temperature due to dehydration and electrolyte imbalance. Management includes rest, oral/IV fluids, and cooling measures.

20. A patient of unstable angina starts bleeding from her nose and gums. Her current medicines are Nitrates, Heparin, Atenolol, Aspirin, Clopidogrel and Simvastatin. Her latest APTT is four times raised. Which therapeutic agent can reverse the effect of heparin?

A. Vitamin K injection

B. IV Tranexamic acid

C. Oral Vitamin C

D. Protamine sulphate

E. Fresh blood transfusion

d. This patient has excessive bleeding with a significantly elevated APTT, indicating heparin overdose. Protamine sulfate is the specific antidote for heparin, neutralizing its anticoagulant effect. Vitamin K is used for warfarin reversal, Tranexamic acid helps with fibrinolysis-related bleeding, and Fresh blood is not the first-line treatment for heparin reversal.

21. A 68 years old woman has been brought in a drowsy state by her daughter. She is a known case of hypothyroidism and has not taken thyroxin since 2 months. Her pulse is 40 BPM, temp is 36 ˚C, BP is 90/50 mmHg. Her pupils are reactive and neck is supple.

What is the most important drug before starting Thyroxin in her case?
A. Propranolol

B. Hydrocortisone

C. Ringer's lactate

D. 25% Dextrose water

E. Propylthiouracil

b. This patient has myxedema coma, a severe form of hypothyroidism presenting with bradycardia, hypotension, hypothermia, and drowsiness. Adrenal insufficiency is common in myxedema coma, and giving thyroxine without corticosteroids can precipitate adrenal crisis. Therefore, IV hydrocortisone should be given first, followed by IV levothyroxine along with supportive care (warming, fluids, and glucose if needed).

22. A 29 years old man has been brought after a bite on his foot by cobra 10 minutes ago. There are two fang marks with surrounding edema, erythema and bleeding. What is the single most appropriate initial step before referral?

A. Immobilization of limb

B. Tourniquet at thigh

C. Surgical cut and bleeding

D. Suction of poison from wound

E. Elevation of limb

a. In cobra snake bite, immobilization with a pressure immobilization bandage (not a tourniquet) helps slow venom spread through the lymphatic system. The affected limb should be kept at heart level (not elevated) to prevent faster venom circulation. Cutting, suctioning, or using a tourniquet is not recommended as they can worsen tissue damage. Urgent referral for antivenom administration and supportive care is essential.

23. A 25 years old male develops pruritis, bronchospasm and shock after receiving penicillin injection. He is given epinephrine but his condition is not improved. When will you repeat epinephrine?

A. 5 minute

B. 30 minute

C. 60 minute

D. 90 minute

E. 120 minute

a. In anaphylaxis, if symptoms persist after the first intramuscular (IM) epinephrine dose, it should be repeated every 5 minutes as needed. IM epinephrine (0.5 mg in adults, 0.01 mg/kg in children) is the first-line treatment. If no response after multiple doses, IV fluids, antihistamines, corticosteroids, and IV epinephrine infusion may be needed in a monitored setting.

24. 35 years old female is found unconscious on roadside. Apparently, there are no sign of trauma. What is the first step according to basic life support guidelines? What step you will take?

A. Check responsiveness of victim

B. 15 Chest compression

C. Jaw trust to open airway

D. 2 rescue breath

E. Check airway and breathing

a. Before starting any intervention, you should assess the victim's responsiveness by tapping and shouting. If unresponsive, proceed with checking breathing and pulse. If absent, initiate CPR with 30 chest compressions followed by 2 rescue breaths. If trauma is suspected, use the jaw thrust maneuver to open the airway instead of the head-tilt/chin-lift technique.

25. 25 years old male patient comes to clinic with avulsed tooth after first fight. The nearest dental surgeon is at a distance of 200 km What is the best medium of transfer of tooth?

A. Milk

B. Formalin

C. Savlon

D. Chlorhexidine

E. Pyodine

a. Milk helps preserve the periodontal ligament cells, keeping the tooth viable for reimplantation. It maintains osmotic balance and provides essential nutrients, preventing cell death. Formalin, antiseptics (Savlon, Chlorhexidine, Pyodine) are harmful and should be avoided. If milk is unavailable, saline or the patient's saliva (by placing the tooth in the buccal vestibule) can be used.

26. A 28 years old man meets a car accident and his head collides with the wind screen. He becomes unconscious. Which of the following emergency step could be dangerous for him?

A. Cardiac manage

B. Mouth to mouth breathing

C. Recovery position

D. Defibrillation

E. IM Epinephrine

c. In a patient with head trauma and potential cervical spine injury, placing them in the recovery position can cause neck movement, worsening spinal cord damage. Instead, the priority is cervical spine immobilization with a rigid collar and log-roll technique if repositioning is needed. Airway protection should be done with a jaw thrust maneuver without head tilt.

27. A 25 years old Primigravida at 34 weeks of gestation met a minor road accident. Her pulse is 105 BPM, BP is 90/60 mmHg and Resp rate is 14/min. There is no obvious wound.

What is the most appropriate initial step in management of this patient?

A. Check fetal heart sound

B. I/V fluids

C. 02 inhalation

D. Left lateral position

E. Ultrasound abdomen

d. In a pregnant trauma patient, maternal hypotension (BP 90/60 mmHg) can be due to supine hypotensive syndrome, where the gravid uterus compresses the inferior vena cava, reducing venous return and cardiac output. Placing the patient in the left lateral position relieves this compression and improves circulation. After positioning, IV fluids and fetal heart sound assessment should follow.

28. A mother brings 2 years old boy 30 minutes after inhalation of a small coin. The child is restless and has a strider. On opening the mouth edge coin is visible in pharynx. What is the single most appropriate initial step to remove this coin?

A. Back blows

B. Hamlick's

C. Jaw thrust

D. Chest Thrust

E. Inverting the child

a. For a conscious child under 1 year with complete airway obstruction, the recommended approach is back blows followed by chest thrusts. Since this child is 2 years old, if he is unable to cough effectively or is in severe respiratory distress (stridor and restlessness suggest partial obstruction progressing to complete), back blows should be attempted first, followed by abdominal thrusts (Heimlich maneuver) if needed. If the coin is easily visible and can be removed safely, it should be done carefully without pushing it further.

29. A woman brings her husband immediately after he got electric shock while repairing a fan at home. The patient is unconscious, pulse is 30 BPM, BP is not recordable and respiratory rate is 20/min. There is 0.5 cm2 entry wound on left hand and exit wound on right foot. What is the most appropriate initial step in management of this patient?

A. Cardiac enzymes

B. Electrocardiogram

C. Chest X-ray

D. Ringer's lactate

E. Subcutaneous adrenaline

b. This patient has severe electrical injury with cardiac instability (bradycardia, undetectable BP, and unconsciousness). Arrhythmias, particularly asystole or ventricular fibrillation, are common after electrical shock. An ECG is the first step to assess for arrhythmias or conduction abnormalities. If cardiac arrest occurs, immediate CPR and advanced cardiac life support (ACLS) protocols should be initiated. Fluids (Ringer’s lactate) and cardiac enzymes may be needed later based on the patient's stability.

30. 30 years old male presents with Shaking of body, confusion, palpitation and restless. He tells you that spiders are crawling all over h body. He also has vomiting, flickering of eye lids and excessive sweating.

Which drug withdrawal symptoms he is having

A. Alcohol

B. Barbiturates

C. Cannabis

D. Morphine

E. Marijuana

a. This patient has alcohol withdrawal symptoms, including tremors (shaking), confusion, hallucinations (spiders crawling), restlessness, palpitations, vomiting, nystagmus (flickering eyelids), and excessive sweating. These symptoms suggest delirium tremens (DT), a severe form of alcohol withdrawal. Management includes benzodiazepines (e.g., diazepam or lorazepam), IV fluids, thiamine, and electrolyte correction.

PALLIATIVE CARE

1. A 70 years old male patient of prostate carcinoma complains of severe backache and weight loss for the last 3 months due to metastatic deposits. He is taking Diclofenac but the pain is not relieved. What is most appropriate specific treatment for his bone pains?

A. Dexamethasone

B. Morphine

C. Paracetamol

D. Strontium

E. Tramadol

d. Bone pain

- (Deep gnawing pain. Worse on moving/weight bearing) - Try NSAIDs and/or strong opioids
- Consider referral for **palliative radiotherapy, strontium treatment (prostate cancer),** or IV bisphosphonates (↓ pain in myeloma, breast, and prostate cancer)
- Refer to orthopaedics if any lytic metastases at risk of fracture, for consideration of pinning. OHGP 5th Ed Page 1015

2. A 65 years old male patient of multiple myeloma complains of severe body pains. He is taking Ibuprofen but no relief. Which is the single most appropriate next step?

A. IM Vitamin D

B. Intranasal Calcitonin

C. IV Bisphosphonate

D. IV Calcium Gluconate

E. IV Dexamethasone

c. Bone pain

- (Deep gnawing pain. Worse on moving/weight bearing) - Try NSAIDs and/or strong opioids
- Consider referral for palliative radiotherapy, strontium treatment (prostate cancer), or **IV bisphosphonates (↓ pain in myeloma, breast, and prostate cancer)**
- Refer to orthopaedics if any lytic metastases at risk of fracture, for consideration of pinning. OHGP 5th Ed Page 1015

3. A 80 years old terminally ill patient of carcinoma of prostate complains of constipation and abdominal fullness for the last two weeks. He passes small soft stools after every 3-4 days. What is the most appropriate management option?

A. Aluminum hydrochloride

B. Bisacodyl suppositories

C. Erect x-ray abdomen

D. Glycerine suppositories

E. Simethicone suspension

b. Constipation - Pre-empt constipation by putting everyone at risk (e.g. patients on opioids) on regular aperients. ↑ fluid intake.

- Treat reversible causes (e.g. alter diet by adding fibre)

- Treat with regular stool softener (e.g. lactulose, macrogol) ± regular bowel stimulant (e.g. senna) or a combination drug (e.g. co-danthrusate). Titrate dose against response
- If that is ineffective, consider adding rectal measures. **If soft stools and lax rectum—try bisacodyl suppositories (must come into direct contact with rectum)**; if hard stools—try glycerol suppositories—insert into the faeces and allow to dissolve
- If still not cleared refer to the DN for lubricant ± stimulant enema.
- Once cleared leave on a regular aperient with instructions to ↑ aperients if constipation recurs. OHGP 5th Ed Page 1019

4. A 65 years old terminally ill male patient of colonic carcinoma complains of intermittent abdominal pain for the last one week. Which one of the following is the most appropriate treatment option for him?

A. Dexamethasone

B. Loperamide

C. Omeprazole

D. Paracetamol

E. Simethicone

b. In a terminally ill patient with colonic carcinoma, intermittent abdominal pain is often due to chronic diarrhea from bowel dysfunction or partial obstruction. Loperamide, an antimotility agent, is effective in reducing diarrhea and controlling associated pain by slowing gut motility.

5. A 60 year old male complains of intractable pain in the right hypochondrium for the last 2 months. He is suffering from inoperable hepatocellular carcinoma. What is the single best treatment option for him?

A. Dexamethasone

B. Hyoscine bromide

C. Loperamide

D. Magnesium hydroxide

E. Silimyrin

a. Abdominal visceral pain (Sharp ache. Worse on bending or breathing) - Liver capsule pain Dexamethasone 4–8mg/d. Titrate dose to control pain. Alternatively try NSAID + proton pump inhibitor cover. OHGP 5th Ed Page 1015

6. A 75 years old female patient of inoperable ovarian carcinoma complains of pain and distension of upper abdomen after meals for the last two months. She is already taking Magnesium hydroxide. Which one is the single most appropriate next step?

A. Bisacodyl

B. Enema

C. Hyoscine

D. Loperamide

E. Simethicone

e. The patient's symptoms of upper abdominal distension and discomfort after meals suggest gastric stasis or bloating, likely due to impaired gastric emptying or bowel dysfunction in the setting of advanced ovarian cancer. Simethicone is an anti-foaming agent that helps reduce gas accumulation and bloating, making it the best choice for symptomatic relief.

7. A 60 year old patient of Hodgkin's lymphoma complains of severe shooting pain in his right arm and forearm for the last one month. He has a large rubbery lymph node in his right axilla. Which one is the single best treatment option for him?

A. Amitriptyline

B. Dexamethasone

C. Gabapentin

D. Paracetamol

E. Tramadol

b. Neuropathic pain (Burning/shooting pain associated with altered sensation) – This patient has most likely nerve compression due to large lymph niode. If pain is due to nerve compression resulting from tumour, **dexamethasone** 4–8mg od may help. OHGP 5th Ed Page 1015

8. A 55 years old male patient of rectal carcinoma complains of severe pain in the rectum for the last two months. Which one of the following is the single most appropriate option for his pain?

A. Depot steroids

B. Intralesional steroids

C. IV steroids

D. Oral steroids

E. Rectal steroids

e. Rectal pain - Topical drugs, e.g. **rectal steroids**. OHGP 5th Ed Page 1015

9. A 55 year old male patient of rectal carcinoma complains of difficulty in passing stools. The anal sphincter is tightly closed.

Which one is the single best treatment option for him?

A. Glycerine suppositories

B. Lignocaine gel

C. Nitrate cream

D. Sitz bath

E. Steroid cream

c. Rectal pain - Anal spasms—**glyceryl trinitrate** ointment 0.1–0.2% bd. OHGP 5th Ed Page 1015

10. A 60 years old patient with carcinoma of urinary bladder complains of intermittent lower abdominal pain and dribbling along the sides o the indwelling catheter for the last one month. Which is the single best treatment option for him?

A. Bupivacaine instillation

B. Lignocaine instillation

C. Local radiotherapy

D. Loperamide orally

E. Meptazinol orally

a. Bladder pain/spasm - If catheterized—try instilling 20mL of **intravesical bupivacaine** 0.25% for 15min tds or oxybutynin 5mL in 30mL od/bd/tds. OHGP 5th Ed Page 1015

11. A 50 years old patient of Astrocytoma complains of headache and vomiting for the last three months. Which one is the single best treatment option for him?

A. Cyclizine

B. Dexamethasone

C. Domperidone

D. Haloperidol

E. Omeprazole

b. Raised intracranial pressure - Occurs with 1° or 2° brain tumours. Characterized by: Headache—worse on lying, Vomiting, Confusion, Diplopia, Convulsions, Papilloedema. Unless a terminal event, refer urgently to neurosurgery for assessment. Options include insertion of a shunt or cranial radiotherapy, If no further active treatment is appropriate, start symptomatic treatment—raise the head of the bed, start **dexamethasone** 16mg/d (stop if no response in 1wk), analgesia. OHGP 5th Ed Page 1019

12. A 30 years old patient of leukemia is quite disturbed and worried due to his vomiting for the last one month. He vomits whenever he thinks of vomiting. What is the best drug for his vomiting?

A. Diazepam

B. Fluoxetine

C. Metoclopramide

D. Omeprazole

E. Ondansetron

a. Vomiting due to Anxiety, fear, or pain - **Benzodiazepines**, e.g. diazepam 2–10mg/d or midazolam sc. OHGP 5th Ed Page 1017

13. A 25 years old patient of non Hodgkin's lymphoma complains of severe vomiting lasing for 5 days after each course of chemotherapy. Which are is the most appropriate treatment option for him?

A. Cyclizine

B. Diazepam

C. Haloperidol

D. Levomepromazine

E. Ondansetron

e. Vomiting due to Chemotherapy/radiotherapy - Granisetron (1mg bd) or **ondansetron** (8mg bd PO or 16mg od PR)—chemo- or radiotherapy-induced vomiting. OHGP 5th Ed Page 1017

14. A 70 years old male patient of lung cancer complains of severe loss of appetite for the last 3 months. He has lost 8 kg in this period. What is the most suitable treatment option for his anorexia?

A. Lysine

B. Omeprazole

C. Pizotifen

D. Prednisolone

E. Simethicone

d. May improve by treating nausea, mouth problems, pain, and psychological distress. Advise small, appetizing meals frequently in comfortable surroundings. Drugs that may be helpful - Alcohol prior to meals, Metoclopramide prior to meals—to prevent feeling of satiety caused by gastric stasis, Dexamethasone 2–4mg od or **prednisolone** 15–30mg od for short-term appetite enhancement

15. A 30 years old male patient of Hodgkin's lymphoma complains of multiple superficial ulcers in his mouth for the last two weeks following a course of chemotherapy.

What is the most appropriate treatment for him?
A. Antiseptic mouth wash

B. Lignocaine oral gel

C. Nystatin oral drops

D. Sucralfate suspension

E. Triamcinolone cream

d. Sore mouth/throat - Associated with head/neck radiotherapy. Consider treatment with: normal saline/bicarbonate mouthwashes; antiseptic mouth washes (e.g. chlorhexidine—though alcohol may sting); soluble aspirin (can be gargled) or paracetamol; benzydamine mouthwash; topical local anaesthetics (e.g. lidocaine® gel); topical steroids; **coating agents (e.g. sucralfate).** If insufficient fluid/food intake, consider nutritional support via nasogastric tube and/or referral for gastrostomy (if weight loss >10%). OHGP 5th Ed Page 1009

16. A 50 years old bedridden, weak female patient of ovarian carcinoma presents with abdominal pain and distension. She has gross ascites. Her BP is 90/50 mmHg.

Which one of the following drugs is most appropriate for her?
A. Albumin

B. Dexamethasone

C. Furosemide

D. Paracentesis

E. Spironolactone

b. Try diuretics—furosemide 20–40mg od and/or spironolactone 100–600mg od. **May take a week to produce maximal effect**. Monitor albumin level—if low, diuretics make ascites worse Dexamethasone 2–4mg daily may help—discontinue if not effective. OHGP 5th Ed Page 1018

17. A 55 years old male patient of chronic kidney disease complains of severe hiccup for the last 10 days.

Which one of the following is the best option for his hiccups?
A. Furosemide

B. Magnesium hydroxide

C. Nifedipine

D. Omeprazole

E. Ranitidine

e. Most likely patient has peripheral hiccup. Peripheral hiccups - Irritation of the phrenic nerve/diaphragm—try metoclopramide (10mg tds), antacids containing simeticone, dexamethasone (4–12mg/d), or **ranitidine** (150mg bd). OHGP 5th Ed Page 1018

18. A 40 years old male patient of Hodgkin's lymphoma complains of diarrhea for the last one week. Two days back he received radiotherapy for his abdominal lymph nodes. Which of the following is the single best option for him?

A. Furazolidone orally

B. Metronidazole orally

C. Prednisolone enema

D. Probiotic orally

E. Psyllium husk

c. Non-skin side effects of radiotherapy: Diarrhoea - Frequently accompanies abdominal/pelvic radiotherapy. Management: dietary modification (e.g. ↓ dietary fibre) may help. Supply with loperamide—4mg initial dose then 2mg every 2h until symptoms settle (4mg every 4h at night) Proctitis may accompany rectal/prostatic irradiation. Treat with **rectal steroids**. OHGP 5th Ed Page 1009

19. A 60 years old male patient of prostatic carcinoma complains of constipation and weakness of legs for the last one week. He feels low back pain which increases on movement. Which one is the single best treatment option for him?

A. Amitriptyline

B. Gabapentin

C. Mecobalamin

D. Morphine

E. Radiotherapy

e. Bone pain (Deep gnawing pain. Worse on moving/weight bearing) - Consider referral for palliative radiotherapy, **strontium treatment** (prostate cancer). OHGP 5th Ed Page 1015

20. A 90 year old terminally ill patient of multiple myeloma complains of constipation. His lab reports show corrected calcium 3.8 mmol/L, Blood urea 120mg/dl, serum creatinine 6 mg. Which one is the single best treatment option in the management of this patient?

A. Alendronate

B. Check calcium level daily

C. Dexamethasone

D. Magnesium hydroxide

E. Pamidronate

d. The patient is terminally ill with multiple myeloma and severe hypercalcemia (Ca^{2+} = 3.8 mmol/L), along with renal impairment. While bisphosphonates like pamidronate are standard for treating hypercalcemia, the main concern in this case is constipation, which is a common symptom of hypercalcemia, immobility, and opioid use in terminally ill patients. Magnesium hydroxide is a laxative that helps relieve constipation without worsening kidney function significantly.

21. A 60 years old male bed ridden patient of advanced bronchogenic carcinoma complains of severe breathlessness, restlessness and cough. Which one of the following is the most appropriate step in management?

A. Dexamethasone

B. Diazepam

C. Furosemide

D. Ipratropium

E. Salbutamol

b. Treat reversible causes, e.g. catheterization for retention, hyoscine to dry up secretions. If still restless, treat with a sedative. This does not shorten life but makes the patient/relatives more comfortable.

Suitable drugs:Oral:

- Haloperidol 1–3mg tds
- Chlorpromazine 25–50mg tds
- **Diazepam 2–10mg tds**

Via syringe driver:

- Midazolam 10–100mg/24h or 5mg stat
- Levomepromazine 50–150mg/24h or 6.25mg stat. OHGP 5th Ed Page 1029

22. A 75 years old male patient of metastatic lung disease complaints of intractable cough for the last 3 months which makes him exhausted and distressed. He has tried over the counter cough remedies but of no benefit. Which one of the following is the most appropriate treatment for him?

A. Methadone linctus

B. Morphine

C. Promethazine

D. Salbutamol

E. Steam inhalation

b. Oral or sc opioids ↓ the subjective sensation of breathlessness and may alleviate cough, e.g. start with 2.5mL of 10mg/5mL **morphine sulfate solution** PO every 4h and titrate upwards. If already taking opioids, ↑ dose by 25%. Titrate dose until symptoms are controlled or the patient experiences side effects. OHGP 5th Ed Page 1025

23. A 70 years old dying patient of bronchogenic carcinoma has excessive secretions in his throat and chest causing noisy breathing which are disturbing for his attendants.

Which one of the following is the most appropriate management for him?

A. Chlorpheniramine

B. Glycopyrroneum

C. Mucolytic agents

D. Nebulized steroids

E. Steam inhalation

b. Excessive respiratory secretion (death rattle) - Noisy, moist breathing. Can be distressing for relatives. Reassure that the patient is not suffering or choking. Try repositioning and/or tipping the bed head down (if possible) to ↓ noise. Treat prophylactically—it is easier to prevent than remove accumulated secretions. Suitable drugs:

- **Glycopyrronium Non-sedative**—give 200 micrograms sc stat and review after 1h. If effective, give 200 micrograms every 4h sc or 0.6–1.2mg/24h via syringe driver
- Hyoscine hydrobromide Sedative in high doses—give 400 micrograms sc stat and review response after 30min. If effective, give 400–600 micrograms 4–8-hourly or 0.6–2.4mg/24h via syringe driver. If the patient is conscious and respiratory secretions are not too distressing, it may be more appropriate to use a transdermal patch (Scopaderm® 1.5mg over 3d) or sublingual tablets. Dry mouth is a side effect. OHGP 5th Ed Page 1029

24. A 70 years old terminally ill male patient of lung cancer is having severe hemoptysis for the last one day. Which one of the following is the best management option for him?

A. Blood transfusion

B. Dexamethasone

C. Midazolam

D. Morphine

E. Vit K injection

c. In patients with lung cancer who have a massive haemoptysis as a terminal event, consider treating with IV morphine/diamorphine and a sedative (e.g. **midazolam** or rectal diazepam) rather than admitting. OHGP 5th Ed Page 267

25. A 60 years old male patient of invasive rectal carcinoma is passing a small amount of blood in the stool for the last 1 day. Which one is the most appropriate management option for him?

A. Dexamethasone orally

B. Hemacel infusion

C. Mesalazine enema

D. Rectal Tranexamic acid

E. Vitamin K injection

d. Non-life-threatening bleed: follow-up treatmentThe most appropriate management option for a 60-year-old male with invasive rectal carcinoma experiencing rectal bleeding is Rectal Tranexamic Acid (Option D). Tranexamic acid helps reduce bleeding by stabilizing clots. OHGP 5th Ed Page 1024.

26. A 48 years old terminally ill patient of breast cancer presents with severe vomiting after starting of opioid therapy since last 1 week. She has tried cyclizine and dimenhydrinate without any benefit.

What is the most appropriate next drug for her?
A. Chlorpromazine

B. Domperidone

C. Haloperidol

D. Metoclopramide

E. Ondansetron

c. Drug/toxin induced Vomiting - **Haloperidol** (1.5–5mg nocte), Levomepromazine (5mg stator 6.25mg nocte), If persistent nausea due to opioids, consider changing opioid. OHGP 5th Ed Page 1017

27. A 55 years old female patient of carcinoma of right breast complains of swelling of the right upper limb. She is taking Diclofenac and Dexamethasone. The limb swelling has increased after starting these tablets.

What is the single most appropriate step in management?
A. Chymotrypsin

B. Furosemide

C. Stop Dexamethasone

D. Stop Diclofenac

E. Warm fomentation

b. Lymphoedema - If the condition has developed or deteriorated since prescription of corticosteroid or NSAID, or if there is a venous component, consider a trial of **diuretics.** Otherwise diuretics are of no benefit. OHGP 5th Ed Page 1025

28. A 50 years old female patient of metastatic breast disease complains of fear, night sweats, restlessness and insomnia for the last two weeks.

What is the most appropriate long term treatment for her sleep?
A. Amitriptyline

B. Buspirone

C. Diazepam

D. Fluoxetine

E. Morphine

c. **Benzodiazepines** should be prescribed for insomnia ‘only when it is severe, disabling, or subjecting the individual to extreme distress. OHGP 5th Ed Page 168

29. A 50 year male patient of choledochal carcinoma complains of pruritus for the last one month. Her lab reports show

Bilirubin	18mg/dl
SGPT	100 IU/L
Alkaline phosphates	3200 IU/L

What is the most appropriate treatment for her pruritus?
A. Chlorpheniramine

B. Cholestyraxxmine

C. Dexamethasone

D. Loratadine

E. Promethazine

b. Cirrhosis - Late signs - Occur when the liver can no longer compensate for the damage to it—jaundice, hepatic encephalopathy, leuconychia, and oedema (due to hypoalbuminaemia) Pruritus 2° to jaundice may respond to **cholestyramine**. OHGP 5th Ed Page 397

30. A 70 years old female falls while getting up from the bed. She is hypertensive and Diabetic. She is taking hydrochlorothiazide and glibenclamide.

What is the most likely cause of his fall?
A. Cognitive impairment

B. Glibenclamide

C. Hydrochlorothiazide

D. Muscular weakness

E. Visual impairment

c. Hydrochlorothiazide is a thiazide diuretic that can cause electrolyte imbalances (hypokalemia, hyponatremia), dehydration, and orthostatic hypotension, leading to an increased risk of falls, especially in elderly patients. Since she fell while getting up from bed, postural hypotension due to diuretic use is the most probable explanation.

31. A 50 years old female patient of metastatic breast cancer is severely depressed after hearing about her diagnosis. She has stopped taking food and stays alone in her room. What is the single best treatment option for her?

A. Amitriptyline

B. Diazepam

C. Escitalopram

D. Flupentixol

E. Haloperidol

d. All antidepressants take ~2wk to work, If immediate effect is required consider using **flupentixol** 1mg od (beware as can cause psychomotor agitation), If not responding or suicidal, refer for psychiatric opinion. OHGP 5th Ed Page 1026

CONFIDENTIALITY/ AUDIT/ EBM/ CONSULTATION MODELS/ BIOSTATISTICS/ VACCINES/ SCREENING

1. A married man with primary infertility was diagnosed with azoospermia due to testicular agenesis. He requested the doctor not to inform his wife, but the wife comes to inquire about the report. What is the most appropriate next step?

A. Refuse to talk on this matter

B. Explain the report only if the husband allows you

C. Tell her only in the presence of her husband

D. Tell her only in the absence of her husband

E. Ask her to find out from her husband herself

b. Confidentiality is a core principle of medical ethics. The physician must respect the patient's wishes not to disclose personal medical information. In this case, the husband has explicitly requested confidentiality, and the wife should be told, if patients allow.

Ethical Principles Involved:

- Confidentiality: The patient’s right to keep their medical information private.
- Autonomy: The patient has the right to control access to their personal information.

2. A 35-year-old man with advanced cancer (life expectancy of 3 months) does not want his wife to know about it. What is the most appropriate next step?

A. Call his wife and tell the truth

B. Don’t tell his wife

C. Advise the patient to tell her himself

D. Ask him to stay at home till his death

E. Explore why he does not want her to know

e. While exploring why he does not want his wife to know may provide insight, the immediate priority is to counsel the patient to disclose the information himself. This approach respects patient autonomy and encourages openness in personal relationships. Directly telling the wife or withholding the information entirely would breach ethical principles

Ethical Principles Involved:

- Autonomy: Respecting the patient’s right to make decisions about their own information.
- Beneficence: Acting in the patient’s best interest by addressing their concerns and supporting them.
- Communication: Encouraging honest and empathetic discussions.

3. A mother brings her 9-year-old son due to deteriorating school performance. Upon interviewing the child alone, you discover he has experienced sexual abuse at school. The child asks you not to tell his parents. What is the most appropriate next step?

A. Maintain confidentiality

B. Give him time to think again

C. Ask him to tell his mother at home

D. Tell his mother about the abuse

E. Inform school authorities

d. In cases of child abuse, the priority is the child's safety and well-being, which overrides confidentiality when the child is a minor. Informing the parent (mother) ensures the child gets the necessary support and protection. It is also important to involve relevant authorities (like child protective services or school authorities) after informing the mother to ensure the issue is addressed adequately.

4. Tania is a 23-year-old unmarried model who was admitted with vomiting and found out to have twin pregnancy. The resident on call has to present this case in the morning round. How should he describe her case?

A. Tanya famous model presented with vomiting.

B. A famous model presented with vomiting.

C. 23-year-old woman was admitted.

D. 23-year-old unmarried model.

E. 23-year-old famous woman.

c. Medical presentations should focus on relevant clinical details and avoid unnecessary personal information like marital status, profession, or fame unless it directly affects the clinical context. In this case, emphasizing that she is a "woman" and her age is sufficient, as the key clinical concern is her twin pregnancy and vomiting. Including unnecessary descriptors such as "unmarried," "model," or "famous" would be unprofessional and irrelevant to the medical case presentation.

Principles to Follow:

Relevance:

- Only include information relevant to the medical condition or management.
- The fact that she is a model or unmarried does not influence the diagnosis or treatment.

Confidentiality:

- Avoid identifying details that could compromise the patient’s privacy, especially in a public or professional setting.

Professionalism:

- Focus on the clinical aspects of the case, ensuring respect and dignity for the patient.

5. A 21-year-old schizophrenic patient requests you to keep his auditory hallucinations confidential from his parents. What is the most appropriate step?

A. Ask him to tell them himself

B. Only mention that he has hallucinations

C. Tell the details of hallucinations to his parents

D. Don’t tell his parents about hallucinations

E. Discuss hallucinations in a group session

d. In this scenario, the patient’s request for confidentiality should be respected unless there is a significant risk of harm to the patient or others. Confidentiality is a cornerstone of medical ethics, even when dealing with psychiatric conditions like schizophrenia. The auditory hallucinations themselves do not automatically warrant disclosure unless they indicate imminent danger (e.g., suicidal or homicidal ideation).

6. A 35-year-old man tests positive for HIV, and his confirmatory test is also positive. He does not want to let his wife know about his condition. What is the most appropriate step?

A. Inform his wife immediately about HIV

B. Tell his wife about HIV and sexual relationship

C. Persuade him to tell his wife himself

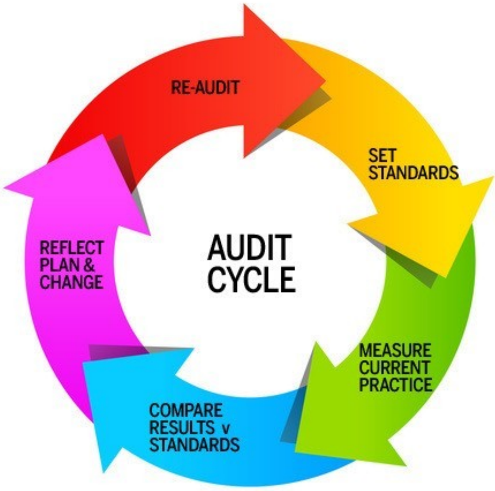
FREE

D. Does not matter as she might already be infected

E. Don’t tell his wife about HIV and sexual relationship

c. In this scenario, the patient's confidentiality must be balanced with the ethical duty to prevent harm to others, including his wife, who may be at risk of contracting HIV. The most appropriate initial step is to persuade the patient to disclose his condition to his wife. This approach respects the patient’s autonomy while encouraging responsible action.

7. A general practitioner notices that most of his diabetic patients are uncontrolled. He wants to conduct an audit of the care of diabetic patients. What should be the most appropriate next step?



A. Find out the international standard of diabetic care

B. Start collecting data of diabetic patients

C. Set a standard that two-thirds of patients should be controlled

D. Compare his data with international data

E. Develop criteria of diabetic care to be measured

e. In a clinical audit, the first step is to develop criteria or standards against which care can be measured. Once these are defined, data collection and comparison can occur. Without clear criteria, it is not possible to evaluate or improve care effectively.

Steps to be followed:

- Develop criteria of diabetic care to be measured
- Set a standard that two-thirds of patients should be controlled
- Find out the international standard of diabetic care
- Start collecting data of diabetic patients
- Compare his data with international data

8. A general practitioner is facing criticism about long waiting times for his patients. His scheduling procedure clusters appointments at certain times. Staff suggests spreading appointments uniformly throughout the day to reduce waiting times. What should be the most appropriate step?

A. Identify the scheduling system of a neighboring practice

B. Set new criteria to measure the scheduling system

C. Compare your scheduling time with other practices

D. Find out from the patients if the new system is working

E. Set a standard waiting time for each patient

b. To address the criticism effectively, the general practitioner must define measurable criteria for the new scheduling system. These criteria will serve as a basis for evaluating whether the changes to the system (e.g., spreading appointments uniformly) result in improved waiting times.

Setting a standard waiting time for each patient is Unrealistic and less relevant than overall average waiting times or other systemic measures.

9. An 80-year-old diabetic man with a urinary tract infection is treated with insulin (18 units daily), metformin (500 mg once daily), and ciprofloxacin (250 mg twice daily). One day later, he develops sweating, palpitations, and restlessness. What is the most likely cause?

A. Side effect of Ciprofloxacin

B. Hypersensitivity to insulin

C. Urinary tract infection

D. Insulin dose is high for him

E. Side effect of Metformin

d. The symptoms of sweating, palpitations, and restlessness are classic signs of hypoglycemia, which can result from an excessive insulin dose. In elderly patients, a dose of 18 units may be too high, leading to low blood sugar levels. This is the most likely cause in this clinical scenario.
Option A (Ciprofloxacin side effects): These symptoms are not common side effects of ciprofloxacin.
Option B (Hypersensitivity to insulin): Hypersensitivity to insulin typically presents with local or systemic allergic reactions, not hypoglycemia symptoms.
Option C (Urinary tract infection): UTIs may cause fever and discomfort but do not typically present with the described symptoms.
Option E (Side effect of Metformin): Metformin is associated with gastrointestinal side effects and rarely lactic acidosis, not the symptoms described.

10. A 45-year-old man was prescribed alprazolam (0.5 mg) at bedtime. A few days later, he was admitted with encephalopathy. What is the most likely cause?

A. Renal Impairment

B. Hepatic Impairment

C. Cerebral Impairment

D. Cardiac Impairment

E. Endocrine Impairment

b. Alprazolam is metabolized by the liver. In patients with hepatic impairment, the drug's metabolism is delayed, leading to accumulation and toxic effects such as encephalopathy. This is particularly concerning in elderly or liver-compromised patients.

11. A 25-year-old pregnant woman in her first trimester presents with fever, sore throat, and painful swallowing. Mandibular lymph nodes are enlarged and tender. Which drug is the most appropriate for her?

A. Erythromycin

B. Lincomycin

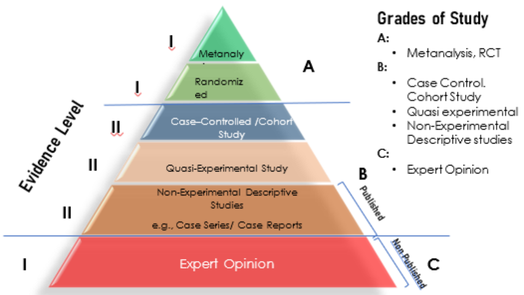
FREE SOURCE

C. Cefixime

D. Ciprofloxacin

E. Loratadine

a. Erythromycin is a safe antibiotic for use during pregnancy, including the first trimester. Other options like ciprofloxacin (associated with cartilage toxicity) and cefixime (may not cover common pathogens causing this presentation) are less preferred.


Evidence Level
I
Metanaly
I
Randomiz ed
II
Case-Controlled /Cohort Study
II
Quasi-Experimental Study
II
Non-Experimental Descriptive Studies
e.g., Case Series/ Case Reports
I
Expert Opinion
A
B
Published
Non-Published
C
Grades of Study
A:
Metanalysis, RCT
B:
Case Control. Cohort Study
Quasi experimental
Non-Experimental Descriptive studies
C:
Expert Opinion

Research Pyramid

12. A doctor in his practice conscientiously judiciously applies the results from randomized controlled trials to guide patient management. Which of the following describes his approach?

A. Best Evidence-Based Medicine

B. Expert Opinion

C. Personal Experience

D. Usual Practice

E. Practice Guidelines

a. Utilizing data from randomized controlled trials (RCTs) aligns with evidence-based medicine (EBM), where decisions are made based on the best available research evidence.

13. A meta-analysis of randomized controlled trials concludes that aspirin is effective for secondary prevention of Coronary Artery Disease. What level of evidence does this indicate?

A. 1a

B. 1b

C. IIa

D. IIb

E. III

a. Meta-analyses of randomized controlled trials (RCTs) represent the highest level of evidence (1a) according to the evidence hierarchy. This level ensures strong recommendations for clinical decision- making.

14. In a study, the risk reduction in experimental group is 35%, while the control group it is 8%. It is an absolute risk reduction. What is the absolute risk reduction?

A. 19%

B. 20%

C. 23%

D. 27%

E. 43%.

d. Absolute Risk Reduction (ARR) is calculated as:
ARR = Rate of Risk reduction in Experimental Group (RER) – Control events Rate (CER)
ARR = 35% - 8% = 27%

15. In one of the studies, the event rate in the experimental group is 20% and in the control group it is 30%. What is the relative risk reduction in this study?

A. 10%
B. 20%
C. 30%
D. 33%
E. 50%

d. Relative Risk Reduction (RRR) is calculated as:
RRR = (Control Event Rate – Experimental Event Rate) / CER x 100
30-20/100 = 33.33%

16. The test result shows a high likelihood ratio. It indicates which of the following most appropriately?

A. Absence of disease
B. Certain presence of disease
C. High probability of disease
D. Low probability of disease
E. Uncertain probability

c. A high likelihood ratio (LR) indicates that a positive test result is much more likely to occur in patients with the disease than in those without it. This implies that the test result provides strong evidence in favor of the disease being present.

17. In an experimental study, a drug was given to a group of 110 patients. The drug has NNT of 1. It indicates effectiveness of the treatment in which of the following number of patients?

A. 1
B. 50
C. 95
D. 100
E. 110

e. NNT – Smaller, the better
NNH – Bigger the better
If the Number Needed to Treat (NNT) is 1, it means that every single patient who receives the drug benefits from the treatment. This indicates that the drug is effective in all 110 patients in this group.

18. A bias is found in an experimental study done to determine the association between the exposure and the disease. In this study, the association of exposure and disease is

A. Confirmed
B. Less likely
C. Most likely
D. Unreliable
E. Probable

d. If a bias is found in an experimental study, it compromises the validity and reliability of the study's findings. This means that the association between exposure and disease cannot be trusted or confirmed due to the presence of systematic error.

19. In a factory area where the people are exposed to smoke, children and adults are studied separately for a period of 5 years to find the effect of smoke on the developmental of the respiratory diseases in these groups. This type of study is of which of the following categories?

A. Case studies
B. Cohort studies
C. Cross-sectional study
D. Randomized controlled trials
E. Retrospective studies

b. This study follows two groups (children and adults) over a period of 5 years to observe the development of respiratory diseases based on smoke exposure. This type of study, which involves following groups over time to observe outcomes, is called a cohort study.

20. A researcher writes an article in which uses explicit methods to comprehensively analyze and qualitatively synthesize information from multiple studies. This article is which of the following categories?

A. Case report
B. Expert opinion
C. Meta-analysis
D. Peer review
E. Systemic review

e. An article that uses explicit methods to comprehensively analyze and qualitatively synthesize information from multiple studies is classified as a systematic review. A systematic review involves a structured and detailed methodology to collect, analyze, and synthesize research evidence, often aiming to answer a specific research question.

21. In a study of 100 patients, adverse effects occur in one patient in the treated cases. NNH in this study is which of the following?

A. 0
B. 1
C. 5
D. 50
E. 100

e. To calculate the Number Needed to Harm (NNH) the formula is: NNH = 1/ AR
where, AR = Absolute Risk = Proportion of patients experiencing adverse effects
AR = Number of patients with adverse effects / total number of patients
In this study:
Number of patients with adverse effects = 1
Total number of patients = 100
AR = 1/100 = 0.01
NNH = 1/0.01 = 100

22. In the experimental study, when intervention, the odd ratios is 0.2. it indicates that adverse events experimental group are

A. Marginally decreased
B. Marginally increased
C. Significantly decreased
D. Significantly increased
E. Unchanged.

c. If the odds ratio suggests lower odds of adverse events in the experimental group and is statistically significant, the answer is C

Here's a general guide:
Odds Ratio (OR):

- OR = 1: No effect (unchanged likelihood of events between the groups).
- OR < 1: Decreased odds of the event occurring in the experimental group compared to the control group.
- OR > 1: Increased odds of the event occurring in the experimental group compared to the control group.

Statistical Significance:
If the confidence interval (CI) of the OR does not include 1, the result is statistically significant. If the CI includes 1, the result is not statistically significant.
Interpretation of Changes:
Marginally decreased/increased: Small, likely not statistically significant change. Significantly decreased/increased: Large, statistically significant change.

23. In general practice, doctors are encouraged to reflect on their own state and prepare themselves mentally before seeing a new patient.

Which consultation model emphasizes this approach?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott and Davis

RESOURC

b. Neighbor. The Neighbor Model of Consultation emphasizes the concept of Housekeeping, where doctors are encouraged to reflect on their emotional and mental state, ensuring they are prepared to engage effectively with the next patient. This step helps maintain the doctor's well-being and ensures high-quality care during consultations.

DIFFERENCES BETWEEN THE MODELS FOR EASY UNDERSTANDING AND COMPARISON

Model	Key Components
Traditional Model	**History, Examination, Investigation, Diagnosis, Treatment, Follow-Up**
Pendleton Model	• **Define the reason for patient's attendance** • **Involve the patient in the management and encourage the patient to accept appropriate responsibility** • Consider other problems—continuing problems and risk factors • Choose an appropriate action for each problem—involves negotiation between doctor and patient • Achieve a shared understanding of the problem between doctor/patient • Use time and resources appropriately • Establish and maintain a relationship between doctor and patient
Fraser Model	Emphasizes the medico-legal and ethical aspects of the doctor-patient interaction Doctor's Areas of competence:

	• Interviewing and history taking • Physical examination • Diagnosis and problem-solving • Patient management • Relating to patients • **Anticipatory care** • **Record-keeping**
Neighbour Model	**The "Five Checkpoints** • Connecting—doctor establishes rapport with the patient • Summarizing—doctor clarifies the patient's reason for consulting • Handing over—doctor/patient negotiate and agree a management plan • **Safety netting**—planning for the unexpected; managing uncertainty • **Housekeeping**—doctor is aware of his/her own emotions
Stott & Davis Model	**4 tasks** • Management of presenting problems • Management of continuing problems • Modification of continuing problems • **Opportunistic health promotion**
RCGP Model	**The triaxial *(*Biopsychosocial) approach – Holistic Approach** Emphasizes Physical, Social, and psychological aspects

24. A diabetic patient comes to the doctor with a nail infection. The doctor manages his infection first, then diabetes, takes this opportunity to advise, exercise, and also tries to change the health-seeking behavior. Which model of consultation describes this?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott & Davis

e. The Stott and Davis Model emphasizes using every consultation as an opportunity to address four key areas:
Managing the patient's presenting problem (e.g., nail infection).

- Continuing management of chronic diseases (e.g., diabetes).
- Opportunistic health promotion (e.g., advising on exercise).
- Modifying the patient's health-seeking behavior (e.g., encouraging better habits).

25. A diabetic patient comes to the doctor with a nail infection. The doctor manages the nail infection, finds out patient's understanding about diabetes and infection. He educates the patient and encourages the patient to take responsibility of diet, exercise, weight control. He checks patient's understanding and also asks for his agreement. Which model of consultation describes this?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

EE RES

E. Stott and Davis

c. The Pendleton Model focuses on understanding the patient's agenda (their ideas, concerns, and expectations), sharing information, and involving the patient in their care. In this scenario, the doctor:

- Assesses the patient's understanding of diabetes and infection.
- Educates the patient about management.
- Encourages the patient to take responsibility for their health.
- Checks understanding and ensures the patient agrees with the plan.

26. A diabetic patient comes to the doctor with a nail infection. The doctor collects all the information about infection and diabetes, examines the patient, makes a diagnosis, negotiates a management plan, orders tests, and also advises pneumococcal vaccine as preventive measure. Which model of consultation is he following?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott & Davis

a. The Fraser Model of Consultation emphasizes the need for a doctor to be competent in:
History-taking,
Physical examination,
Diagnosis,
Management,
Communication skills,
Record-keeping.

This model focuses on the medico-legal and ethical responsibilities of doctors, ensuring that all aspects of the consultation are thorough, professional, and well-documented. These competencies are central to the Fraser Model.

27. A diabetic patient comes to the doctor with a nail infection. The doctor manages infection, diabetes, and also asks about his ability to cope with diabetes. He also asks about the effect of diabetes on his life and profession. Which model of consultation is he following?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott and Davis

d. The RCGP Model of Consultation emphasizes a biopsychosocial approach to patient care, considering the patient's physical, psychological, and social well-being. In this case:
The doctor manages the infection and diabetes (physical care),
Explores the patient's ability to cope with diabetes (psychological aspect),
Investigates the effect of diabetes on the patient's life and profession (social aspect).
This comprehensive approach aligns with the RCGP Model, which focuses on understanding the patient holistically and addressing their overall context.

28. Consultation has four potentials and one of them is Opportunistic Health Promotion. Which model of consultation describes this?

A. Fraser

B. Neighbour

C. Pendleton

D. RCGP

E. Stott and Davis

e. The Stott & Davis Model of Consultation identifies four potentials in each consultation:
Management of presenting problems.
Management of continuing problems.
Modification of health-seeking behaviors.
Opportunistic health promotion.
The opportunistic health promotion potential focuses on using the consultation as an opportunity to address preventive care or health education, even if unrelated to the presenting problem. This is a hallmark of the Stott & Davis Model.

29. When patients come to doctors, they have main reason to see the doctor. Which model of consultation describes this?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott and Davis.

c. Pendleton's model. The Pendleton Model of Consultation emphasizes understanding the main reason for the patient's attendance. This includes exploring the patient's ideas, concerns, and expectations (ICE) related to their visit. The first step in the Pendleton Model is to define the patient's reason for seeking medical attention, which aligns with the question's focus on addressing the patient's primary concern.

30. For successful consultation, a doctor need to be competent in history-taking, physical examination, diagnosis, management, communication skills, and record-keeping. Which model of consultation describes this?

A. Fraser

B. Neighbor

C. Pendleton

D. RCGP

E. Stott and Davis

a. The Fraser Model of Consultation emphasizes the need for a doctor to be competent in:
History-taking,
Physical examination,
Diagnosis,
Management,
Communication skills,
Record-keeping.
This model focuses on the medico-legal and ethical responsibilities of doctors, ensuring that all aspects of the consultation are thorough, professional, and well-documented. These competencies are central to the Fraser Model.

31. DPT vaccination is done routinely in children for prevention of disease. This is an example of which of the following.

A. Chemoprophylaxis

B. Passive immunization

C. Primary prevention

D. Secondary prevention

E. Tertiary prevention

c. The routine administration of the DPT vaccine in children is an example of primary prevention. This type of prevention aims to prevent the onset of diseases by providing immunity and reducing risk factors.

There are three main types of prevention in public health and medicine: primary prevention, secondary prevention, and tertiary prevention. Each focus on different stages of disease progression:

Primary Prevention

Goal: Prevent the onset of disease or injury by reducing risk factors and increasing resistance.

Target Population: Healthy individuals with no signs of disease.

Examples:

- Immunizations (e.g., vaccines like DPT, MMR).
- Promoting healthy behaviors (e.g., exercise, healthy diet).

Secondary Prevention

Goal: Detect and treat diseases in their early stages to halt progression and improve outcomes.

Target Population: Individuals who are at risk or have early, asymptomatic stages of a disease.

Examples:

- Screening tests (e.g., mammograms for breast cancer, blood pressure monitoring for hypertension).
- Regular check-ups for early detection.

Tertiary Prevention

- Goal: Manage and reduce complications of established diseases to improve quality of life and functionality.
- Target Population: Individuals with symptomatic disease or established health conditions.
- Examples:
  - Rehabilitation programs (e.g., physical therapy after a stroke).
  - Management of chronic diseases (e.g., insulin therapy for diabetes, cardiac rehabilitation post-heart attack).
  - Pain management and palliative care.

32. In a health care setting cervical screening of all adult females is done for the early detection and treatment of cancer. This strategy is a form of which of the following?

A. Health promotion

B. Life style modification

C. Primary prevention

D. Secondary prevention

E. Tertiary prevention

d. Secondary prevention

33. A diabetic man presents with 24-hour urine report showing urinary proteins, 250 mg/day. Physicians offer Captopril tablets. This is an example of which of the following,

A. Chemoprophylaxis

B. Health promotion

C. Primary prevention
D. Secondary prevention
E. Tertiary prevention.

e. Tertiary prevention involves prevention of progression, as in this case where urinary protein is being managed to prevent further kidney damage.

34. A patient presents with hemiplegia. Physician advises good bed care and physiotherapy to prevent bed sores and contractures. This management is an example of which of the following
A. Primary prevention
B. Secondary prevention
C. Tertiary prevention
D. Palliative care
E. Surgical care.

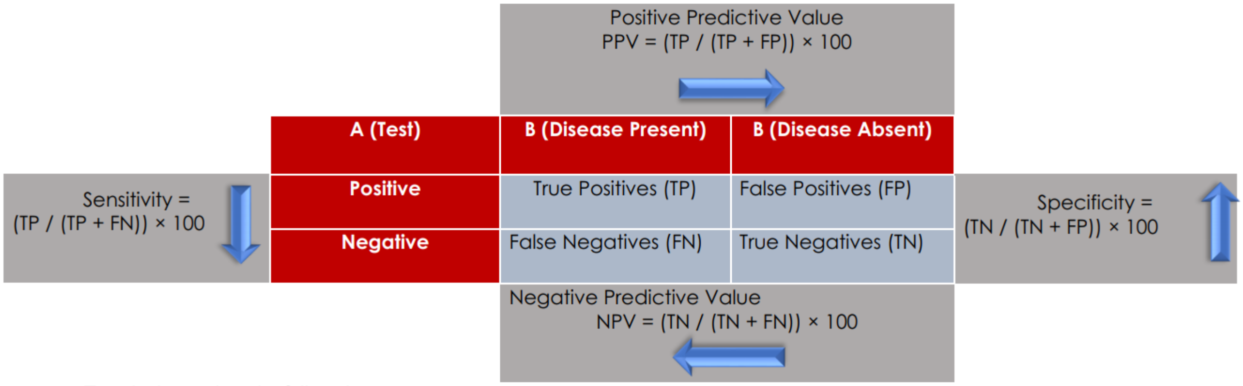
c. Preventing bedsores and contractures is an example of tertiary prevention. Tertiary prevention aims to manage and improve quality of life and reduce complications for those with chronic conditions.

35. Wilson - Jungner's crieteria is a useful tool in health care systems. which of the following is true about it?
A. Disease is only detected in advanced age.
B. Treatment benefit is same in early and late stages.
C. The condition being screened for is not an important health problem.
D. There is a suitable test to detect early-stage disease.
E. Cost is more as compared to benefit.

d. There is a suitable test to detect early-stage disease.

SOURCE

2X 2 TABLE



Positive Predictive Value
PPV = (TP / (TP + FP)) × 100

A (Test)	B (Disease Present)	B (Disease Absent)
Positive	True Positives (TP)	False Positives (FP)
Negative	False Negatives (FN)	True Negatives (TN)

Sensitivity = (TP / (TP + FN)) × 100

Specificity = (TN / (TN + FP)) × 100

Negative Predictive Value
NPV = (TN / (TN + FN)) × 100

To calculate values by follow the arrows:

- Put the value at start of arrow from corresponding cell of 2x2 table as nominator and put addition of rest of values as denominator. e.g., For sensitivity, put TP as Nominator, put (TP + FN) as denominator and you will get value of Sensitivity
- Here you go……….

36. You are provided with the values in the 2x2 contingency table below. Calculate the sensitivity, Specificity, Positive predictive value, Negative predictive value, of Test A for detecting Disease B.

	Disease B Present	Disease B Absent
Positive	30	50
Negative	10	80

What is the sensitivity of Test A for Disease B?
A. 25%
B. 37.5%
C. 75%
D. 61.5%
E. 89%

d. To calculate sensitivity, specificity, positive predictive value (PPV), and negative predictive value (NPV), you use the values from a 2x2 contingency table like the one below:

Test Results	Disease Present	Disease Absent
Positive	True Positives (TP)	False Positives (FP)
Negative	False Negatives (FN)	True Negatives (TN)

Sensitivity:
The ability of a test to correctly identify those with the disease (True Positives).
Formula:
Sensitivity=True Positives (TP) / True Positives (TP)+False Negatives (FN) ×100 This measures the proportion of actual positives that are correctly identified.
Specificity: The ability of a test to correctly identify those without the disease (True Negatives). Formula: Specificity=True Negatives (TN) / True Negatives (TN)+False Positives (FP) ×100 This measures the proportion of actual negatives that are correctly identified.
Positive Predictive Value (PPV):
The proportion of positive test results that are true positives.
Formula:
PPV=True Positives (TP) / True Positives (TP)+False Positives (FP) ×100
This measures the likelihood that a positive test result corresponds to the disease.
Negative Predictive Value (NPV):
The proportion of negative test results that are true negatives.
Formula:
NPV=True Negatives (TN) / True Negatives (TN)+False Negatives (FN) ×100
This measures the likelihood that a negative test result corresponds to the absence of the disease.

37. Example of 2x2 table is given an their values (Sensitivity, Specificity, PPV and NPV are calculated below)

	Disease Present	Disease Absent
Positive	30 (TP)	50 (FP)
Negative	10 (FN)	80 (TN)

Sensitivity:
Sensitivity = (30 / 30+10) ×100 = 75%
Specificity:
Specificity = (80 / 80+50) ×100 = 61.5%

- Positive Predictive Value (PPV): PPV = (30 / 30+50) ×100 = 37.5%
- Negative Predictive Value (NPV): NPV = (80 / 80+10) ×100 = 88.9%

38. 30 years old obese man comes for advice about weight. Which one of the following is the best indicator of obesity in his case?

A. Body mass index

B. Height and weight

C. Weight in Kg

D. Waist circumference

E. Thickness of the arm

a. Body mass index

39. 45 years old obese hypertensive man comes to discuss his chances of developing heart problems

Which one of the following is the best indicator of obesity in his case?

A. Body mass index

B. Height and weight

C. Weight in Kg

D. Waist circumference

E. Thickness of the arm

d. Waist circumference

40. A 45-year-old man visits the clinic to measure his Body Mass Index (BMI). His weight is 80 kg, and his height is 160 cm. What is his BMI?

A. 27

B. 28

C. 29

D. 30

E. 31

e. BMI = Weight (kg) / height $(m)^2$
BMI = 80 / 1.6 ^{2} = 80 / 2.56 = 31.25

41. A 30-year-old woman was very happy with her diet plan, as it worked effectively in the first month. However, she now notices that her weight loss has plateaued. You explain to her that the rapid weight loss during the first few weeks is primarily due to:

A. Enthusiasm to reduce weight

B. Rapid depletion of body fat

C. Protein loss from the muscles

D. Water and glycogen depletion

E. The body reacting more quickly initially

d. During the initial stages of a diet, rapid weight loss is often observed. This is primarily due to the depletion of glycogen stores in the liver and muscles, which is accompanied by the loss of water. For every gram of glycogen, about 3 grams of water are stored. Once glycogen stores are depleted, the rate of weight loss slows as the body transitions to burning fat and, in some cases, lean muscle tissue, which happens at a slower rate. This explains the plateau in weight loss after the initial rapid decline.

42. A 46-year-old hypertensive woman visits your clinic with a BMI of 38 kg/m². She mentions that she loves eating and asks for medication to help reduce her weight. What is the single most appropriate choice of medication?

A. Furosemide

B. Orlistat

C. Metformin

D. Sibutramine

E. Acarbose

b. Orlistat is an appropriate choice for weight management in this case. It works by inhibiting gastrointestinal lipase, reducing fat absorption, and promoting weight loss. It is particularly suitable for patients with obesity (BMI ≥30 kg/m² or ≥27 kg/m² with comorbidities like hypertension). Other options like sibutramine are not recommended due to safety concerns (withdrawn in many regions), and furosemide is not used for weight loss but for fluid management. Metformin and acarbose are used in specific contexts like diabetes but are not the first-line choice for weight management in this scenario.

43. A 50-year-old male with a history of posterior wall myocardial infarction (MI) and diabetes for the past 15 years has a BMI of 38.8. He reports difficulty resisting food, whether at work or at home when others are eating nearby. He asks for medication to help manage his weight. What is the best choice of medication for him?

A. Metformin

B. Orlistat

C. Sibutramine

D. Fluoxetine

E. Furosemide

b. Orlistat is the best option for weight management in this patient with obesity (BMI ≥30) and comorbidities (diabetes and history of MI). It works by inhibiting fat absorption, which can help reduce weight without significant cardiovascular risk. Sibutramine is contraindicated in patients with a history of cardiovascular disease. Metformin is primarily used for glycemic control in diabetes but is not a first-line option for weight management. Fluoxetine and furosemide are not appropriate for weight loss in this context

44. Mother of 22 years old female died due sudden MI. One year later she seems unable to run the school the way she was doing before which situation describes it best

A. Normal grief reaction

B. Traditional model of grief

C. Prolonged grief

D. Inhibited grief

E. Recent model of grief

c. > 1 year is Prolonged grief

45. 40 years old female comes for cessation of smoking. In which condition you will not advise Nicotine Replacement Therapy?

A. Dementia

B. Bipolar disorder

C. Pregnancy

D. Epilepsy

E. TIA

E. Nicotine Replacement Therapy - ↑ the chance of stopping ~1½×. All preparations are equally effective. Start with higher doses for patients highly dependent. Continue treatment for 3mo, tailing off dose gradually over 2wk before stopping (except gum which can be stopped abruptly). Contraindicated immediately post-MI, stroke, or TIA, and for patients with arrhythmia. OHGP 5th Ed Page 156

46. 50 years old sexually active female comes for routine medical check up. You offer her screening for cervical cancer.

Screening for cervical cancer is recommended in which of the following age group?

A. 30 to 64

B. 25 to 54

C. 20 to 54

D. 25 to 64

E. 23 to 65

d. 25 to 64 – UK👇

CANCER SCREENING RECOMMENDATIONS ACCORDING TO THE ACOG AND NICE

	Organization	Start Age	Screening Test	Frequency
Cervical Cancer	**ACOG**	21 years	Pap smear	Every 3 years (21–29 years)
		30 years	Pap + HPV co-testing	Every 5 years (or Pap every 3 yrs)
	NICE	25 years	Cervical cytology (HPV primary screening)	Every 3 years (25–49 years)
				Every 5 years (50–64 years)
Breast Cancer	**ACOG**	40–50 years	Mammogram	Annually or biennially (as advised)
	NICE	50 years	Mammogram	Every 3 years (50–70 years)
Colorectal Cancer	**ACOG**	45–50 years	Colonoscopy	Every 10 years
			FIT or FOBT	Annually
	NICE	60 years	FIT	Every 2 years (60–74 years)

47. 50 years old female comes to see you for routine checkup. She tells you that her last cervical smear was done 3 years back. When should cervical smear be done again?

A. 1 year

B. 2 years

C. 3 years

D. 4 years

E. 5 years

C. 3 years☝

48. 55 years old female comes to your clinic routine check up and screening for breast cancer. Her mammography is normal. After how many years will you repeat mammography?

A. 1 year

B. 2 years

C. 3 years

D. 4 years

E. 5 years

c. 3 years☝

49. 55 years old diabetic man comes for routine follow up. His eye examination is normal When will you call him for next eye examination?

A. 3 months

B. 6 months

C. 9 months

D. 12 months

E. 15 months

d. Digital retinal photography is available throughout the UK. Ensure patients are referred early for retinal screening (<3mo after diagnosis) and are screened ≥1×/y to detect retinopathy before visual loss occurs. OHGP 5th Ed Page 328

50. A patient presents with tremors, insomnia sweating, and generalized anxiety, waiting to be seen, he becomes disoriented, and eventually goes into shock. The patient most likely suffering withdrawal from

A. Amphetamines

B. Barbiturates

C. Marijuana

D. Heroin

E. Inhalants

b. The patient is most likely suffering withdrawal from **Barbiturates**. Barbiturate withdrawal can cause tremors, insomnia, sweating, anxiety, confusion, and, if severe, can progress to shock, seizures, and delirium. Symptoms typically develop within 6-12 hours after cessation or reduction of use and can be life-threatening without proper management

51. A 30 yeas old male presented with running nose, watering eyes restlessness, gooseflesh, tremors, tachycardia, diarrhea, abdominal cramps and insomnia. He has not taken his "drug" For last 3 days. Which one of the following drug he was taking?

A. Benzodiazepines

B. Barbiturates

C. Ecstasy

D. Opiates

E. LSD

d. Opioid withdrawal symptoms

- Within 24h muscle aches; restlessness/anxiety; watering eyes/runny nose; excessive sweating; yawning; inability to sleep
- Later Diarrhea; abdominal cramps; goosebumps (‘cold turkey’); nausea/vomiting; blurred vision and dilated pupils; tachycardia; ↑ BP. OHGP 5th Ed Page 167

52. A 30 years old man presents with tremors, tachycardia, tachypnea and cramps. He is not taking his drug for 3 days. Which of the following is most likely drug?

A. Benzodiazepines

B. Barbiturates

C. LSD

D. Cocaine

E. Methadone

a. BZP slows breathing, HR, therefore, their withdrawal will cause Tachycardia, Tachypnea and Tremor

53. A 30-years male presents with hallucination, aggressiveness, behavioral excitation attributed to a drug overdose. On examination he has rapid pulse, high Blood pressure and mydriasis. Which one of the following is most likely to be responsible for these symptoms?

A. Amphetamine

B. Ethanol

C. Fentanyl

D. Benzodiazepine

E. Marijuana

a. The most likely cause is **Amphetamine**. Amphetamine overdose can cause hallucinations, aggression, agitation, hypertension, tachycardia, hyperthermia, and mydriasis due to excessive stimulation of the central nervous system and sympathetic overactivity. It can also lead to severe complications like seizures and cardiovascular collapse.

54. A 30 years old woman's husband died 4 years ago. She frequently visits her husbands room and often talks to him. Which one of the following best describes this condition?

A. Normal grief reaction

B. Abnormal grief

C. Depression

D. Delayed grief

E. Psychosis

b. Abnormal grief

55. A 65 years old woman lost her husband 1 month ago. Initially she coped very well but with time she began to feel hopeless, apathic and socially withdrawn. She has lost hope of improvement.

What is the most likely diagnosis?

A. Normal grief reaction

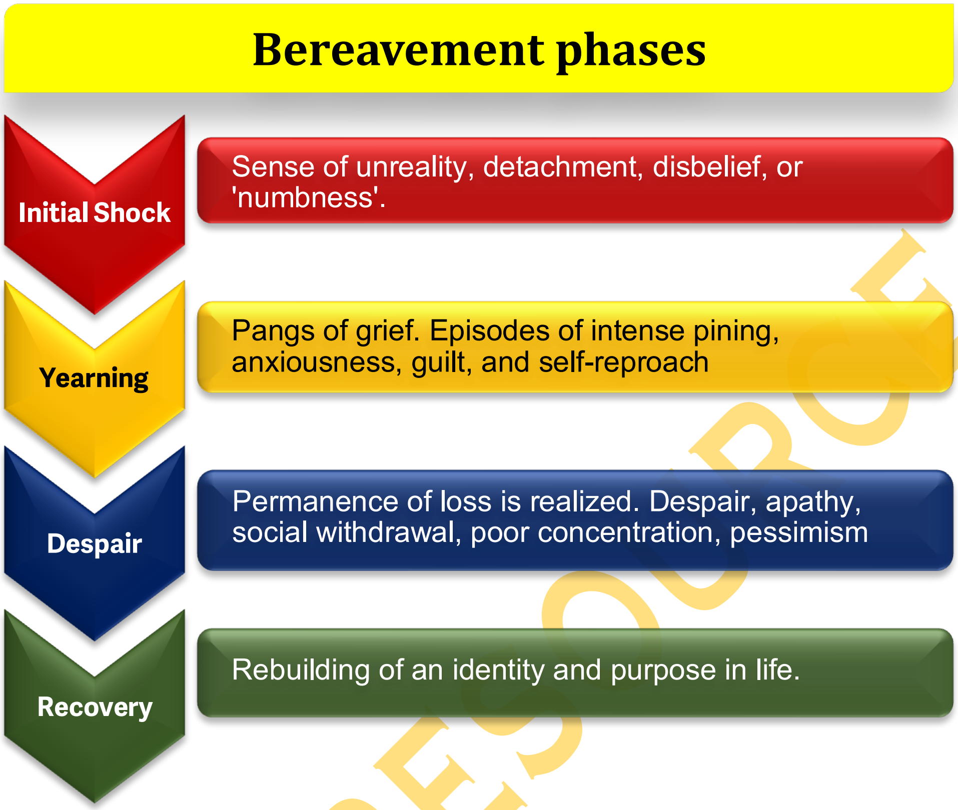
B. Abnormal grief reaction

C. Depression

D. Anxiety disorder

E. Borderline personality disorder

a. Normal grief reaction



Bereavement phases

Initial Shock	Sense of unreality, detachment, disbelief, or 'numbness'.
Yearning	Pangs of grief. Episodes of intense pining, anxiousness, guilt, and self-reproach
Despair	Permanence of loss is realized. Despair, apathy, social withdrawal, poor concentration, pessimism
Recovery	Rebuilding of an identity and purpose in life.

56. A 70 years old man has come for screening for prostate cancer. He is asymptomatic. What is the single best choice for him?

A. Digital rectal exam (DRE)

B. Transabdominal ultrasound

C. Transrectal ultrasound

D. Prostate specific Antigen (PSA)

E. DRE & PSA together

e. The most effective screening regime involves rectal examination and PSA testing followed by TRUS for suspicious lesions. Optimal screening interval is unknown but serial screening does ↑ detection. OHGP 5th Ed Page 434

57. A 60 years old man has come for screening for rectal cancer. He is asymptomatic. What is the single best choice for him?

A. Colonoscopy

B. Sigmoidoscopy

C. Digital rectal exam

D. Stool occult blood

E. Barium enema

d. Faecal immunochemical test (FIT) kits are sent every 2y to all patients aged 60–74y with instructions for completion/return. Results are sent to the patients in <2wk. OHGP 5th Ed Page 368

MOCKS

MOCK 1

1. A couple brings her 3 years old daughter with complaints of cough, running nose and fever of 100°F for 2 days. She is taking less than normal feeds & diet and there is harsh vesicular breathing bilaterally. Her respiratory rate is 32/minute What is the most likely diagnosis?

A. Acute Bronchitis

B. Atypical pneumonia

C. Bronchial asthma

D. Reactive airway disease

E. Viral infection

e. Bronchiolitis- Common lower respiratory tract infection in infants aged <1y. Occurs in epidemics—usually in winter. Mostly caused by respiratory syncytial virus (RSV). Infants at ↑ risk of severe disease include: premature babies; very young babies (<12wk old); and children with underlying lung disease, congenital heart disease, neuromuscular disease, or immunosuppression. Coryza (1–3d) followed by persistent cough, rapid breathing ±feeding difficulty. May present with apnoea. Examination: tachypnoea; recession; widespread crepitations/wheeze; fever (30%—usually <39°C—if higher consider pneumonia). OHGP 5th Ed Page 855

2. A 70 years old presents with severe cough with Muco-purulent sputum and fever of 101°F before. There are bilateral crepts and rhonchi. since a flu epidemic swept the house 5 days What is the most likely pathogen involved in this case?

A. Haemophilus Influenzae

B. Influenza A virus

C. Mycoplasma pneumonae

D. Respiratory Syncytial virus

E. Streptococcus pneumonae

e. The patient has post-viral pneumonia, which commonly occurs after an influenza infection. Streptococcus pneumoniae is the most common bacterial cause of secondary pneumonia following a flu epidemic, presenting with fever, productive cough with mucopurulent sputum, and bilateral crepitations and rhonchi.

3. A 32 years old female comes to emergency room with 15 days history of fever, cough and left sided chest pain. Her temp is 101°F, R/R is 36/min, X-ray chest = left pleural effusion. Aspirate of pleural fluid shows:

Proteins: 45 g/L
Glucose: 20 mg/dL
WBC: 12 x 10 per liter
Lymphocytes: 75%
Neutrophils: 25%
What is the most appropriate diagnosis?

A. Atypical pneumonia

B. Pneumothorax

C. Tuberculosis

D. Typical pneumonia

E. Viral pneumonia

c. The patient, a 32-year-old female with fever, cough, and left-sided pleuritic chest pain for 15 days, has left pleural effusion on X-ray. Pleural fluid analysis shows high protein (45 g/L), low glucose (20 mg/dL), and predominant lymphocytosis (75%), which strongly suggests tuberculous pleurisy. Unlike typical bacterial pneumonia, which causes neutrophilic effusions, tuberculosis typically presents with a chronic lymphocytic exudate. Atypical and viral pneumonias rarely cause pleural effusion, and pneumothorax would not present with effusion.

4. A 19 years old I/V drug user presents with cough, fever for 3 days. His Temperature is 101° F, Pulse 110/mins, B.P 90/60 mmHg, RR 34/min.

What is the most appropriate initial drug?

A. Amoxicillin

B. Penicillin

C. Cloxacillin

D. Erythromycin

E. Ciprofloxacin

a. This IV drug user with fever, cough, hypotension, and tachypnea likely has community-acquired pneumonia (CAP), with Streptococcus pneumoniae being the most common cause. Amoxicillin is the first-line treatment for typical CAP. While Staphylococcus aureus is a concern in IV drug users, it is more commonly associated with septic emboli and endocarditis rather than primary pneumonia. Cloxacillin covers MSSA but is not the best initial choice for CAP, while erythromycin is preferred for atypical pneumonia, and ciprofloxacin is not a first-line option.

5. A 25 years old H.IV positive patient comes with tuberculin skin test report showing induration of 7m.m.

What will be the next step in management?

A. No action required at this time

B. Repeat Test after 3 months

C. I.N.H prophylaxis for 6 month

D. Start 5 drug A.T.T intensive phase

E. Start 4 drug A.T.T intensive phase

c. In an HIV-positive patient, a tuberculin skin test (TST) induration of ≥5 mm is considered positive for latent tuberculosis infection (LTBI). Since this patient has no active TB symptoms, the next step is isoniazid (INH) prophylaxis for 6 months to prevent progression to active TB. No action or repeating the test is inappropriate as LTBI treatment is recommended in HIV. Starting full anti-TB treatment is unnecessary without active TB evidence.

6. A 50 years old physical trainee comes with slight cough and fever of 99°F for 8 days. His Tuberculin test shows 12 mm induration. His investigation & history is unremarkable. What will be the next step in management?

A. No action required at this time

B. Repeat Test after 3 months

C. L.N.H prophylaxis for 6 month

D. Start 3 drug A.T.T intensive phase

E. Start 4 drug A.T.T intensive phase

a. A tuberculin skin test (TST) induration of ≥10 mm is considered positive in high-risk groups, but this 50-year-old physical trainee has no significant risk factors for TB progression and an unremarkable history/ investigations. His low-grade fever and mild cough could be due to a viral illness rather than TB. Latent TB treatment is reserved for high-risk individuals (e.g., HIV, immunosuppression, recent TB exposure). Full ATT is only needed for active TB cases. Repeating the test is unnecessary as TST remains positive for life after prior exposure.

TUBERCULIN TESTING AND INTERPRETATION OF RESULTS - OHGP

Diameter of Induration	Positivity	Interpretation
<6mm	Negative	Suggests no TB infection—beware false negatives. Previously unvaccinated people may be given BCG provided there are no contraindications.
6–14mm	Positive	Should not be given BCG. May be due to previous TB infection, BCG vaccination, or exposure to non-tuberculous mycobacteria.
≥15mm	Strongly positive	Suggests TB infection or disease. Refer for investigation.

7. A 50 years old printer presents with multiple joint pains for the last 10 days. He is taking ATT for 11/2 months. His serum uric acid is 9 mg/dl and ESR is 40 mm in 1st hr.

Which drug is responsible for it?

A. Isoniazid

B. Rifapicin

C. Pyrazinamide

D. Ethambutol

E. Streptomycin

c. A 50-year-old printer on ATT for 1.5 months presents with multiple joint pains, elevated serum uric acid (9 mg/dl), and an ESR of 40 mm in the first hour. The most likely cause is Pyrazinamide, as it is known to cause hyperuricemia and gout-like symptoms.

8. A 65 years old chronic smoker presents with three months history of haemoptysis and weight loss. His CXR shows a patch at right upper lung zone.

FREE

What is the single most appropriate nex investigation?

A. Bronchoscopy

B. CT scan of chest

C. MRI

D. Sputum for AFB

E. Thoracoscopy

b. Characteristics on plain films associated with malignancy are as follows: lesions larger than 2 cm, corona radiata sign of spiculated rays, irregular or scalloped border, lack of calcification, and growth in size within 2 years. High-resolution CT should be performed to follow lesions over time for changes in appearance or size. Swanson Family Medicine Review 9th Ed Pg 333.

9. A 32-year-old patient presents with shortness of breath and wheezing twice a week for the last 5 months. He is taking salbutamol inhaler as required. What will be the most appropriable next step in management?

A. Beclomethsone

B. Montellukast

C. Prednisolone

D. Salmeterol

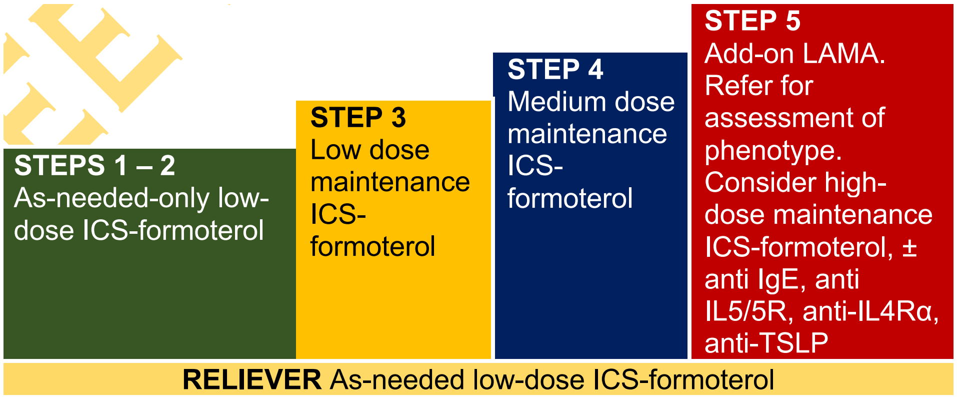
E. Theophylline

a. A 32-year-old patient with shortness of breath and wheezing twice a week for 5 months, already using a salbutamol inhaler, likely has mild persistent asthma. The most appropriate next step is Beclomethasone (inhaled corticosteroid) to control inflammation and prevent symptoms.

GINA 2024 – ADULTS AND ADOLESCENTS 12+YEARS

TRACK 1

TRACK 1:
PREFERRED CONTROLLER and **RELIEVER** Using ICS-formoterol as the reliever* reduces the risk of exacerbations compared with using a SABA reliever, and is a simpler regimen



STEPS 1 – 2 As-needed-only low-dose ICS-formoterol

STEP 3 Low dose maintenance ICS-formoterol

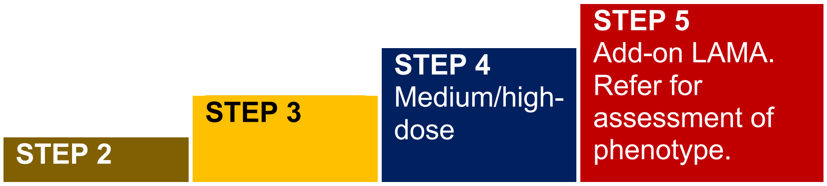
STEP 4 Medium dose maintenance ICS-formoterol

STEP 5 Add-on LAMA. Refer for assessment of phenotype. Consider high-dose maintenance ICS-formoterol, ± anti IgE, anti IL5/5R, anti-IL4Rα, anti-TSLP

RELIEVER As-needed low-dose ICS-formoterol

TRACK 2

TRACK 2:
Alternative **CONTROLLER** and **RELIEVER** Before considering a



STEP 2

STEP 3

STEP 4 Medium/high-dose

STEP 5 Add-on LAMA. Refer for assessment of phenotype.

regimen with SABA reliever, check if the patient is likely to adhere to daily controller treatment	**STEP 1** Take ICS whenever SABA taken	Low-dose maintenance ICS	Low-dose maintenance ICS-LABA	maintenance ICS-LABA	Consider high-dose maintenance ICS-LABA, ± anti-IgE, anti-IL5/5R, anti-IL4Rα, anti-TSLP
	RELIEVER - As-needed ICS-SABA, or as-needed SABA				

10. A 19 years old female asthmatic patient presents with hoarseness of voice after taking her beclomethasone inhaler.

What is the single most appropriate preventive measure to avoid hoarseness?

A. Antiseptic gargles after inhaler

B. Change to salmetrol inhaler

C. Decrease dose of medication

D. Rinse mouth after inhaler

E. Stop beclomethasone inhaler

d. A 19-year-old female asthmatic patient develops hoarseness of voice after using her beclomethasone inhaler, which is likely due to oropharyngeal candidiasis or vocal cord irritation. The most appropriate preventive measure is to rinse the mouth after using the inhaler to reduce local steroid deposition and minimize side effects.

11. A 49-year-old smoker presents with cough & mucoid sputum for the last 10 years. His chest x-ray shows bronchial thickening. What will be the most appropriate diagnosis?

A. Bronchial asthma

B. Emphysema

C. Chronic bronchitis

D. Bronchiectasis

E. Sarcoidosis

c. A 49-year-old smoker with a chronic cough and mucoid sputum for 10 years, along with bronchial thickening on chest X-ray, is most likely diagnosed with chronic bronchitis, a subtype of COPD characterized by persistent productive cough for at least 3 months in 2 consecutive years.

12. A 28-year-old female teacher presents with severe cough at night for last 4 months. She has no fever, wheezing, weight loss. Her physical examination and investigations are unremarkable

What is the most appropriate diagnosis?

A. Allergic bronchitis

B. Bronchial asthma

C. Chronic obstructive pulmonary disease

D. Cough variant asthma

E. Paroxysmal nocturnal dyspnea

d. Cough variant asthma. It is a form of asthma where chronic dry cough is the only symptom, typically worsening at night. The absence of wheezing, fever, and abnormal examination findings supports this diagnosis. It is often confirmed with a positive methacholine challenge test or improvement with bronchodilator therapy.

13. A 65 years old patient of known COPD comes for routine follows up. He has been vaccinated with Influenza vaccine last month. Which other vaccine would you recommend for him regarding his disease?

A. BCG

B. Hepatitis B

C. Hib

D. Meningococcal

E. Pneumococcal

e. COPD: Vaccination - All patients with COPD should have influenza and pneumococcal vaccination. OHGP 5th Ed Page 286

RESOURCE

14. A 7 years old asthmatic boy who is on inhaled beclomethasone and salbutamol presents with upper respiratory tract infection since 3 days. His peak flow readings have been 60 % of his best since last 1 month.

What is the most appropriate next step?

A. Commence montelukast

B. Commence oral steroids

C. Commence salmeterol

D. Continue current management

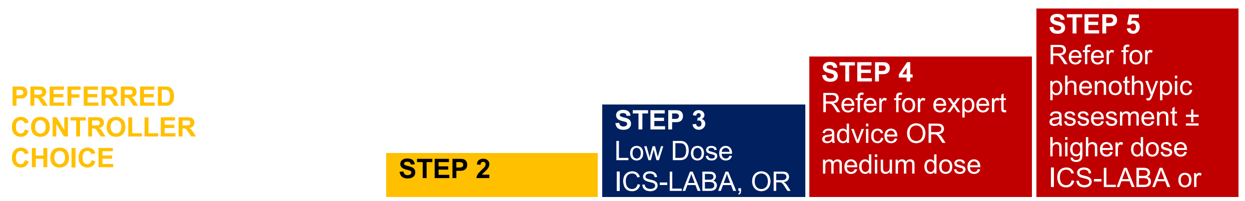
E. Increase dose of salbutamol

c. GINA Recommended Next Step (Step 3 for 6–11 years old)

- Preferred option: Increase ICS dose OR add a long-acting beta-agonist (LABA) like salmeterol in a combination inhaler (ICS/LABA).
- Alternative option: Add leukotriene receptor antagonist (LTRA) like Montelukast, especially if there are associated allergic symptoms.
- Oral steroids (like Prednisolone) are not recommended unless there is an acute severe exacerbation.

Since this child has persistent symptoms despite ICS, the best step is adding LABA (Salmeterol) or increasing ICS dose. https://ginasthma.org/wp-content/uploads/2024/05/GINA-2024-Strategy-Report-24_05_22_WMS.pdf?

GINA 2024 – CHILDREN 6-11 YEARS



	STEPS 1 Lose Dose ICS taken whenever SABA taken	Daily "Low Dose Inhaled Corticosteroids (ICS)	very low dose ICS-formeterol mainyenance and reliver (MART)	ICS-LABA, OR low dose ICS-formeterol maintenance and reliever tyhrapy (MART)	add-on therapy, e.g, anti-IgE, anti-IL4Ra, anti-IL5
Other controller options (limited indications, or less evidence for efficacy or safety)		*Daily Leukotriene Receptor Antagonist (LTRA) or intermittent short course of ICS at onset of respiratory illness*	*Lose dose ICS + LTRA,*	*Add LTRA or increase ICS frequency or add intermittent ICS*	*As last resort, consider add-on low dose OCS but consider side effects*
RELIEVER	As-needed Short acting beta$_2$-agonists				

15. A 55 year old asthmatic presents with productive cough and fever of 100°F. He is taking maximum doses of beclomethasone, salmetrol and salbutamol inhalers. His peak flow readings 70% of his best.

What will be the next step in management?

A. Bombetrol

B. Cromoglycate

C. Ipratropium

D. Montelucast

E. Prednisolone

e. The patient is on maximum combination inhaler therapy (ICS + LABA) (Track 2) and still has a reduced peak flow, which suggests they are not well-controlled. The productive cough and fever indicate a likely respiratory infection is contributing to their symptoms. Given that the patient already seems to be at Step 4 or potentially even approaching Step 5 in asthma management, the acute infection needs to be addressed in addition to their chronic asthma control. Prednisolone is the most appropriate next step. The patient is experiencing an asthma exacerbation, possibly triggered by the infection. Oral corticosteroids are a key component of managing asthma exacerbations, reducing airway inflammation, and improving lung function.

16. A 30 years female comes with SOB and wheezing for last 3 months. Her initial peak flow is 420 L/minute. Which of the following levels of peak flow will diagnose her as asthmatic after salbutamol inhaler use?

A 430 l/minute

B 440 L/minute

C 450 L/minute

D 460 L/minute

E 480 L/minute

e. 480 L/min is the best answer among the options provided. While the strict ≥20% reversibility criterion for asthma diagnosis isn't met (which would require 504 L/min), an improvement of ≥12%

and ≥200 mL in PEFR or FEV1 is also considered significant, based on NICE and GINA guidelines.

17. A 30 years male known diabetic comes for routine check up. His waist is of 110 cm, BP is 160/96 mm of Hg and fasting blood sugar is 120 mg/dl. For the diagnosis of metabolic syndrome which other investigation will be required?

A. HBA1C

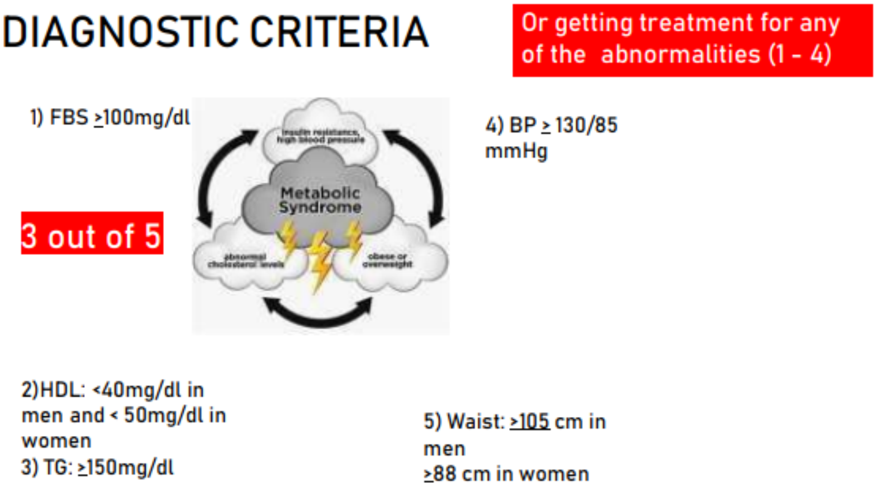
B. HDL

C. LDL

D. Total cholesterol

E. VLDL

c. HDL 👇



insulin resistance, high blood pressure
Metabolic Syndrome
abnormal cholesterol levels
obese or overweight

DIAGNOSTIC CRITERIA

Or getting treatment for any of the abnormalities (1 - 4)

1) FBS ≥100mg/dl

3 out of 5

4) BP ≥ 130/85 mmHg

2)HDL: <40mg/dl in men and < 50mg/dl in women

3) TG: ≥150mg/dl

5) Waist: ≥105 cm in men

≥88 cm in women

18. A 55 years old diabetic patient comes with attacks of weakness, palpitation & sweating once a month for last 3 months. He recovers after taking some sweets. Her BP is 110/ 80 Hg and BMI is 29 Kg/m2. BSR 140 mg/dl. She is taking gliclizide. Which is the single most appropriate alternate drug for her?

A. Acarbose

B. Glibenclamide

C. Lente Insulin

D. Metformin

E. Pioglitazone

d. The patient has recurrent hypoglycemia, likely due to gliclazide, a sulfonylurea that stimulates insulin secretion. The best alternative is Metformin, as it does not cause hypoglycemia and is the first-line treatment for type 2 diabetes, especially in overweight patients (BMI 29 kg/m²). Other options like glibenclamide and insulin would worsen hypoglycemia, while acarbose and pioglitazone are less effective as monotherapy.

FREE

19. A 30 years old businessman comes with his blood sugar reports showing BSF=130 mg/dl, BSR 220 mg/dl. He is not following lifestyle modifications and taking irregular meals. Which one of the following is the appropriate drug for him according to NICE guidelines?

A. Acarbose

B. Glibenclamide

C. Metformin

D. Pioglitazone

E. Repaglinide

c. The patient has uncontrolled diabetes (BSF 130 mg/dL, BSR 220 mg/dL) and is not following lifestyle modifications. According to NICE guidelines, the first-line treatment for type 2 diabetes is Metformin, especially for overweight individuals or those with irregular meal patterns, as it does not cause hypoglycemia. Sulfonylureas (glibenclamide, repaglinide) and pioglitazone are not first line choices, and acarbose is less effective.

20. A 42 years old diabetic female comes with her blood reports showing following results: FBS-160 mg/dl, HbA1C = 9 %. R.B.S=300 mg/dl. Her BMI is 21 Kg/m2. She walks 3 km daily and follows strict diabetic diet for 3 months. What is the most appropriate drug for him?

A. Acarbose

B. Exenatide

C. Glibenclamide

D. Metformin

E. Pioglitazone

c. For lean patients with severe hyperglycemia, a sulfonylurea like Glibenclamide is appropriate to stimulate insulin secretion. GLP-1 agonists (Exenatide) and Pioglitazone are more suitable for obese patients, while Acarbose is less effective in reducing HbA1c significantly.

21. A 53 years old diabetic patient presents with gradual swelling of feet for 2 months after starting new medicine for her blood sugar. Her BSR-200mg/dl, HbA1C = 8.2% and BMI - 22 Kg/m2.

Which one of the following is most likely responsible for her swelling?

A. Acarbose

B. Exenatide

C. Glibenclamide

D. Metformin

E. Pioglitazone

e. Pioglitazone - 15mg od. ↓ peripheral insulin resistance. Does not cause hypoglycaemia. May ↑ weight. Check LFTs before and regularly during treatment. ↑ risk of bladder cancer, bone fracture, fluid retention, and heart failure; avoid if risk factors for these conditions. OHGP 5th Ed Page 320

22. A 40 years old man has been advised endoscopy for his persistent dyspepsia. She had an attack of infective endocarditis last year. What antibiotic prophylaxis would you suggest before endoscopy?

A. Amoxicillin

B. Clarythromycin

C. Clindamycin

D. Gentamycin

E. Metronidazole

a. Amoxicillin or Clindamycin (if allergic to penicillin) used to be used as prophylactic antibiotic before endoscopy for patients with a history of infective endocarditis, However, NICE guidelines now recommends: No antibiotic prophylaxis is required before endoscopy for patients with a history of infective endocarditis, unless the procedure involves a high risk of bacteremia (e.g., biopsy, dilation, or ERCP in biliary obstruction).

23. A 40 years old known hypertensive patient comes with his lab reports advised by you on revious visit. His serum creatinine level is 3 gm/dl & urinalysis shows proteins ++.
According to NICE guidelines what should be your B.P goal for him?

A. <150/95

B. <140/90

C. <135/85

D. <130/80

E. <110/75

d. The patient has chronic kidney disease (CKD) with proteinuria (serum creatinine 3 mg/dL, proteinuria ++). According to NICE guidelines, the target BP for hypertensive patients with CKD and proteinuria is <130/80 mmHg to reduce the progression of kidney disease.

24. A 35 years old male has a history of hypertension and has been prescribed a new antihypertensive agent. His triglycerides are increased.

Which one of the following drugs could cause this?

A. Amlodipine

B. Atenolol

C. Lisinopril

D. Methyldopa

E. Spironolactone

b. Secondary causes of hyperlipidaemia: Drugs – Steroids, β-blockers,Thiazides, COC pill, Isotretinoin,Antipsychotics ‹Tamoxifen ‹Antiretrovirals. OHGP 5th Ed Page 223

25. A 55 years old hypertensive patient presents with sudden drop out attacks, dizziness and breathlessness. His pulse is 48/min & B.P is 110/70 mm of Hg. He is using different drugs to control his blood pressure.

Which drug you would like to change to control his symptoms?

A. Aspirin

B. Enalapril

C. Hydrochlorthiazide

D. Simvastatin

E. Verapamil

c. Thiazide diuretics can cause dehydration, electrolyte imbalances (hyponatremia, hypokalemia), and volume depletion, leading to dizziness, drop attacks, and breathlessness due to reduced circulating volume. Since the patient is already hypotensive (BP 110/70 mmHg) and has bradycardia (pulse 48/min), discontinuing hydrochlorothiazide would help prevent further complications.

26. A 40 years old male presents with retrosternal chest pain which is increased by inspiration & relieved by sitting. Lung fields are clear & heart sounds are muffled. What is the next step for evaluation?

A. CK-Mb

B. Echocardiogram

C. Serial ECGS

D. Thallium scan

E. X-rays chest

b. Echocardiogram (Echo): 2-dimensional Produces a fan-shaped, cross-sectional, moving, real-time image of the heart. May be transthoracic or transoesophageal. Used to asses valvular abnormalities and prosthetic heart valves; aortic aneurysm/dissection; heart failure; **pericardial effusion**; masses within the heart; myocardial abnormalities (e.g. aneurysms, hypertrophy); IHD; congenital heart disease. OHGP 5th Ed Page 210

27. A 62 years old male had two episodes of syncope about one month apart. They were not preceded by any chest pain or discomfort. Which of the following is most suitable to yield diagnosis?

A. C.T brain

B. Carotid Doppler

C. Echocardiogram

D. Femoral Doppler

E. MRI brain

c. The patient has recurrent syncope without chest pain, which suggests a cardiac cause rather than a neurological one. The best test to evaluate structural heart disease or valvular abnormalities (e.g., aortic stenosis, cardiomyopathy) is an Echocardiogram.

28. A 65 years old man whose BP was previously well controlled on Verapamil presents again with uncontrolled blood pressure. There are no cardiovascular risk factors. other cholesterol is 240 mg/dl and LDL is 165 mg/dl. Which one medicine would you like to add to his prescription to control his BP?

A. Atenolol

B. Felodipine

C. Lisinopril

D. Terazocin

E. Thiazide diuretic

c. According to NICE guidelines, in patients already on a non-dihydropyridine CCB, the preferred second-line drug is an ACE inhibitor (e.g., Lisinopril) or a Thiazide diuretic.
Lisinopril is preferred because it works synergistically with CCBs, reducing BP without affecting **lipid levels**.

29. A 48 years old diabetic and hypertensive male had acute myocardial infarction three months back. On follow up visit his blood pressure is 140/90 mm of Hg. He is taking Losartan, Aspirin, Insulin and Simvastatin.

Which one medicine would you like to prescribe to control his blood pressure?

A. Alprazocin

B. Amlodipine

C. Furosemide

D. Spironolactone

E. Verapamil

e. A 48-year-old diabetic and hypertensive male with a history of myocardial infarction, currently on Losartan, Aspirin, Insulin, and Simvastatin, has a BP of 140/90 mmHg. The most appropriate additional antihypertensive is Amlodipine, a calcium channel blocker, which is effective in post-MI patients and safe for diabetics. Verapamil is not preferred in this case because it is a non-dihydropyridine calcium channel blocker (CCB) that has negative inotropic effects, meaning it can depress cardiac contractility. In a patient with a history of myocardial infarction, this can worsen heart failure or reduce cardiac output. Additionally, Verapamil can cause bradycardia and AV block, which may be problematic, especially if the patient has any conduction abnormalities.

30. Mr. Chaudhry is a patient of hypertension and is not taking any antihypertensive. On routine check up his blood sugar was also found high. At which level you would like to start antihypertensive medicine?

A. 150/90 mmHg

B. 140/90 mmHg

C. 135/85 mmHg

D. 130/90 mmHg

E. 130/80 mmHg

b. In a hypertensive patient with diabetes, NICE guidelines recommend initiating antihypertensive treatment at a BP ≥ 140/90 mmHg (measured in a clinic) or ≥135/85 mmHg (measured at home or via ambulatory BP monitoring).
Since this patient has hypertension and newly diagnosed diabetes, the correct threshold for starting treatment is 140/90 mmHg

31. Mrs. Khan had an acute M.I. two weeks ago and she was discharged from the hospital without any complications. She wants to start driving again. When will you allow her to resume driving after M.I.?

A. Two week

B. Four weeks

C. Six weeks

D. Eight weeks

E. Ten weeks

a. Driving Group 1 licence - No need to notify the DVLA. Stop driving. Restart after 1wk if successful PCI and no other revascularization planned in <4wk. Otherwise driving can restart **4wk** after the event. OHGP 5th Ed Page 231

32. A 45 years old man is found to have high levels of serum lipids. You started him on Simvastatin 40 mg daily.

When would you like to repeat his lipids after starting simvastatin?

A 2-4 weeks

B 4-6 weeks

C 6-8 weeks

D 8-10 weeks

E 10-12 weeks

e. Recheck lipid profile in 3mo. If target is not met: promote lifestyle measures, check concordance, ↑ dose (if tolerated/not on maximum)
Check liver function 3mo and 1y after initiating statin/changing dose; do not recheck again unless clinically indicated
Do not routinely check CK levels—only if muscle pain. OHGP 5th Ed Page 224

33. A 55 years old man comes to your clinic for routine checkup. He had two attacks of M.I with in one year.

Which is the most common cause for sudden death in this patient?

A. Artial Fibrillation

B. Ventricular ectopic

C. Ventricular extrasystole

D. Ventricular fibrillation

E. Ventricular tachycardia

d. The most common cause of sudden cardiac death (SCD) after myocardial infarction is Ventricular Fibrillation (VF).
VF is a life-threatening arrhythmia that leads to cardiac arrest due to rapid, uncoordinated contractions of the ventricles.
It is the primary cause of sudden death in post-MI patients, especially within the first year.

34. A 49 years old woman with chronic heart failure comes for follow up. She is taking regular doses of Hydrochlorothiazide, Enalapril and bisoprolol. Her pulse is 80 BPM and BP is 130/80 mm Hg. She still complains of breathlessness.

Which one of the following drugs should be added to her prescription?

A Beta blockers

B Calcium channel blockers

C Digoxin

D Nitrates

E Statins

c. According to NICE guidelines, in symptomatic heart failure with reduced ejection fraction (HFrEF), the next step is to add Digoxin, if symptoms persist despite optimized therapy, especially if there is persistent breathlessness or atrial fibrillation.

HEART FAILURE – PHARAMCOLOGICAL MANAGEMENT

Step	Management
Step 1	• **ACEI or ARB**: If not tolerated, seek specialist advice and consider **Hydralazine + Nitrate** in HFrEF. • **Beta Blockers** (Bisoprolol, Carvedilol, Nebivolol, **not Atenolol**): Start low, go slow. If contraindicated, consider **Ivabradine**.
Step 2	**Mineralocorticoid/Aldosterone Receptor Antagonist** (e.g., Spironolactone) in combination with **ACEI or ARB**. Contraindicated in **CKD Stage 4** or **Serum K+ > 5**.
Step 3	If ongoing symptoms, refer for specialist advice. **Sacubitril/Valsartan**: • **For NYHA Class II - IV** • **For EF ≤ 35%**.
Step 4	• Ivabradine if sinus rhythm & resting **HR > 75 bpm** with **LVEF < 35%**. • **Digoxin** as an add-on for symptomatic patients in **sinus rhythm** on optimal therapy. • **Hydralazine/Isosorbide Dinitrate** if intolerant to **ACEI, ARB, or Sacubitril/Valsartan**. • Consider **Implantable Cardioverter Defibrillator (ICD)**, **Cardiac Resynchronization Therapy (CRT)**, and **Heart Transplantation** in selected patients.

35. A 65 years old man walks in your clinic with complaint of dyspnea and nocturnal cough. His pulse is 98/min and BP is 165/95. He has crackles in the chest. His X-ray chest shows cardiomegaly.

Which one of the following is most appropriate screening test for cardiac failure?

A. BNP

B. BUN

C. CK-MB

D. Echo

E. MRI

a. How should I assess a person with suspected chronic heart failure?

- Measure their N-terminal pro-B-type natriuretic peptide level (NT- proBNP)
- If the NT-pro-BNP level is above 2000 pg/mL (236 pmol/L), refer urgently for specialist assessment and echocardiography to be seen within 2 weeks.
- If the NT-pro-BNP level is between 400-2000 pg/mL (47-236 pmol/L), refer for specialist assessment and echocardiography to be seen within 6 weeks.
- If NT-pro-BNP is less than 400 pg/mL (47 pmol/L), be aware that a diagnosis of heart failure is less likely.

Be aware that the level of serum natriuretic peptide does not differentiate between heart failure with reduced ejection fraction and heart failure with preserved ejection fraction

36. A 70 years old man with chronic heart failure comes for routine check up. His symptoms are well controlled. Which one of the following vaccines is recommended for him in relation to his heart failure?

A. Hemophilus influenza

B. Hepatitis B

C. Influenza

D. Meningococcal

E. Tetanus

c. Vaccination – Pneumococcal and annual influenza vaccination. OHGP 5th Ed Page 234

37. A 40 years old business man comes with acute chest pain, vomiting and sweating. What is the most appropriate lab investigation for him?

A BNP

B CK-MB

C LDH

D Troponin I

E Troponin T

d. In a 40-year-old man with acute chest pain, vomiting, and sweating, the most appropriate lab investigation for diagnosing acute myocardial infarction (MI) is Troponin I or Troponin T. Between Troponin I and Troponin T, either can be used, but Troponin I is slightly more specific for myocardial damage.

38. A 58 year old man presents to your clinic four weeks after being hospitalized for myocardial infarction. He is complaining of chest pain, fever, and multiple joint pains. Laboratory tests do not show an increase in cardiac enzymes. What is the treatment of choice for him?

A. Antibiotics

B. Immunosuppressant drugs

C. NSAIDS

D. Opioids

E. Steriods

c. Dressler syndrome (post-MI syndrome) - Develops 2–10wk after MI or heart surgery as a result of autoantibodies to heart muscle. Presents with recurrent fever and chest pain ± pleural and/or pericardial effusion. Management: Refer urgently for cardiology advice. Treatment is with steroids and NSAIDs. OHGP 5th Ed Page 231

39. A 64 year old female comes to your clinic with an ulcer on the anterior aspect of her leg for one month. The skin of her leg is very thin and shiny. She also has severe eczema on her leg. Yesterday she shopped all day and developed severe lower limb edema.

What is the treatment of choice for her?

A. Advise support stocking

B. Avoid prolong standing

C. Reduce weight

D. Refer for surgery

E. Walk regularly

a. Stasis Eczema - If symptoms are troublesome Advise support stockings; avoid standing for prolonged periods and if standing do not stand still; walk regularly; ↓ weight (if obese). OHGP 5th Ed Page 582

40. 40 years old man is found to have Triglyceride level of 550 mg/dl and Cholesterol level of 180 mg/dl. He does not have risk factors for coronary artery disease. His uric acid is 9 mg/dl.

Which drug you would like to avoid in this case?

A. Clofibrate

B. Fenofibrate

C. Gemfibrozil

D. Nicotinic acid

E. Simvastatin

e. Do not offer fibrates, nicotinic acid, bile acid sequestrants, or omega-3 fatty acid for prevention of CVD. Ezetimibe may be used if statin is contraindicated/not tolerated, or combined with low-dose statin to achieve target cholesterol levels. OHGP 5th Ed Page 225

41. A 48 years old male comes with symptoms of respiratory tract infection. His blood pressure and blood sugar are normal. There is no family history of Ischemic heart disease. His serum triglyceride level is 250 mg/dl.

How would you classify his triglycerides?

A. Borderline high

B. High

C. Near optimal

D. Optimal

E. Very high

b. According to NICE and AHA guidelines, triglyceride levels are classified as follows:

- Normal: <150 mg/dL
- Borderline high: 150–199 mg/dL
- High: 200–499 mg/dL
- Very high: ≥500 mg/dL

Since the patient's serum triglyceride level is 250 mg/dL, it falls in the "High" category.

42. A 30 years old female presents with angular chielitis, glossitis and dysphagia. Her nails are brittle and spoon shaped. Which is the most specific test you advise to her?

A Iron binding capacity

B Reticulocyte count

C Serum Ferritin

D Serum Iron level

E Serum transferin

c. The patient's symptoms—angular cheilitis, glossitis, dysphagia (suggestive of Plummer-Vinson syndrome), and koilonychia (spoon-shaped nails)—are characteristic of iron deficiency anemia.

The most specific test for diagnosing iron deficiency anemia is Serum Ferritin, as it directly reflects iron stores in the body

43. A 6 years old child is brought by her mother. He looks pale & lethargic. His C.B.C shows Hb 9 g/dl, MCV 68fl, and MCHC 30 g/dl. What is the most appropriate step in his management?

A Cyanocobalamine

B Ferrous Gluconate

C Ferrous Sulphate

D Iron polymaltose

E Parenteral iron therapy

c. Treat underlying cause where possible. Give ironsupplements, e.g. **ferrous sulphate** 200mg bd po—may turn stools black and cause constipation. If not tolerated, try lower dose or alternative preparation, e.g. ferrous fumarate. Fruit juice rich in vitamin C taken with the iron may ↑ iron absorption. Hb should ↑ by 1g/dL/wk—confirm response 2–3wk after starting treatment. Continue treatment for 3mo after correction of deficiency to replenish iron stores. OHGP 5th Ed Page 640

44. 12 years old baby comes with severe anemia, recurrent infections & bruises on his body. Few weeks back he used chloramphenicol for his enteric fever. Which of the following report will indicate his condition?

A Decreased reticulocytes

B Fragmented RBCs

C Increased reticulocytes

D Polychromasia

E Spherocyte in blood

c. The 12-year-old child with severe anemia, recurrent infections, and bruising after using chloramphenicol likely has aplastic anemia, which is a known adverse effect of chloramphenicol.

Aplastic anemia is characterized by bone marrow failure, leading to pancytopenia (low RBCs, WBCs, and platelets) and low reticulocyte count due to marrow suppression. The best indicator is: Decreased reticulocytes

45. A 15 yrs old boy presents with recurrent episodes of severe pain in his digits and toes whenever he is exposed to cold or is dehydrated. His Hb is 8 gm/dl & reticulocyte count is increased.

Which is the definite test for his diagnosis?

A Bone marrow biopsy

B Full blood count

C Hb electrophoresis

D Peripheral blood picture

E RBC osmotic fragility test

c. The 15-year-old boy with recurrent painful episodes in digits and toes triggered by cold or dehydration, anemia (Hb 8 g/dL), and increased reticulocyte count suggests Sickle Cell Disease (SCD). FBC and film—chronic anaemia with sickling on film. Confirm diagnosis with haemoglobin electrophoresis. OHGP 5th Ed Page 645

46. An 8 years old child is brought by his mother for palpable neck swellings, easy fatigability & fever for the last three months. He has generalized lymphadenopathy & patechie on his body. Peripheral blood film shows blast cells.

What is the most likely diagnosis?

A Acute Lymphoblastic

B Acute myeloid leukemia

C Aplastic anemia

D Chronic Lymphocytic

E Infectious mononucleosis

a. Acute lymphoblastic leukaemia (ALL) - Abnormal proliferation in the lymphoid progenitor cells. Incidence is 1–4/100,000 population/y. Usual age range: 2–10y with a peak at 3–4y. **Accounts for 85% of childhood leukaemia**. Incidence then falls with increasing age apart from a secondary peak at ~40y. OHGP 5th Ed Page 652

47. A mother brings her 6 years old child who was recently discharged from the hospital after chemotherapy for acute leukemia. His younger brother develops measles rash.

What will you advise for this leukemia patient?

A. Acyclovir

B. Amantadine

C. Antibiotic

D. Measles Ig

E. Reassurance

d. The 6-year-old child recently underwent chemotherapy for acute leukemia, making him severely immunocompromised. His younger brother has measles, putting him at high risk of severe measles complications (pneumonia, encephalitis). The best option is: Measles Ig (Passive Immunization)

48. A 65 years old man presents with bone pain, dyspnea & frequent chest infections. He also developed renal stones recently. His peripheral blood film shows increase rouleaux formation with increase serum calcium level. What is the most specific diagnostic test for him?

A Bone narrow biopsy

B Renal ultrasonography

C Serum electrophoresis

D Serum protein

E Skeletal X-rays

a. The combination of bone pain (location-specific), hypercalcemia, normochromic normocytic anemia, renal failure, weakness, depression, confusion, and history of bacterial pneumonia points to the diagnosis of multiple myeloma. The diagnosis will be substantiated by skull radiograph (showing punched-out lesions), serum electrophoresis with monoclonal peak, and demonstration of Bence Jones protein in the urine. Multiple myeloma is a disease of older patients, with the mean age being 68 years. It appears to be more common than average in farmers, petroleum workers, wood workers, and leather workers. Swanson Family Medicine Review 9th Ed Page 324

Bone marrow biopsy: >10% plasma cells defines myeloma. Master the Boards 11th Ed

49. A 30 years old patient presents with painless lymphadenopathy, weight loss & fever for the last 3 months. He is also having Pruritus & enlarged spleen.

Which is the single most specific diagnostic test?

A Bone narrow biopsy

B C.T abdomen

C CBC with peripheral film

D Chest X-ray

E Lymph mode biopsy

e. The 30-year-old patient with painless lymphadenopathy, weight loss, fever (B symptoms), pruritus, and splenomegaly suggests Hodgkin’s or Non-Hodgkin’s Lymphoma. The most specific diagnostic test is: Lymph node biopsy

50. A 25 years old female presents with easy bruising, epistaxis and heavy menstrual bleeding. Her CBC is normal but Bleeding Time is increased. Which factor deficiency she is likely having?

A Factor II

B Factor IX

C Factor VIII

D Fibrinogen

E VW factor

e. The 25-year-old female with easy bruising, epistaxis, and heavy menstrual bleeding, a normal CBC, but increased bleeding time, suggests Von Willebrand Disease (VWD).

VWF deficiency leads to defective platelet adhesion, causing mucosal bleeding and prolonged bleeding time, while CBC and PT are usually normal.

51. A 45 years old patient presents with epigastric pain after meals for the last 3 months associated with bloating and heartburn. He tells you that his friend was diagnosed as a case of a Ca. stomach last month. What is most appropriate step in the management?

A Esomeprazole

B H. pylori antibody testing

C H. pylori eradication

D Refer for endoscopy

E Simithicone

e. Simethicone is a silicone compound used for the management of flatulence and bloating. It relieves the discomfort produced by the presence of excess gas in the gastrointestinal tract.

52. 20 years old boy presents with recurrent mild jaundice since his childhood usually after intercurrent infections and during fasting. His total bilirubin is 6 mg/dl and unconjugated bilirubin is 4.3 mg/dl. All other liver function tests are normal

What is most appropriate diagnosis?

A Crigglar Najjar syndrome

B Dubin Johnson syndrome

C Gilbert's Syndrome

D Rotar's syndrome

E Wilsons syndrome

c. Gilbert’s syndrome – Inherited metabolic disorder causing unconjugated hyperbilirubinaemia. Prevalence: ~1–2%. Onset is shortly after birth—but the condition may go unnoticed for years. Jaundice occurs during intercurrent illness. ↑ bilirubin on fasting can confirm the diagnosis. Liver biopsy is normal. No treatment is required and prognosis is excellent. OHGP 5th Ed Page 398

53. A 20 years old patient presents with blood report showing

Hep B s Ag Negative
Hep B s Ab Positive
Hep B c Ig G Positive
Hep Be Ag Negative
What is her current stage?

A. Acute infection

B. Carrier state

C. Chronic infection

D. Recovered state

E. Vaccinated

d. The presence of Hep B surface antibody (Hep B s Ab) and Hep B core IgG (Hep B c IgG) positive, with Hep B surface antigen (Hep B s Ag) negative, indicates past infection with recovery and immunity. If the patient were vaccinated, Hep B core IgG would be negative. Chronic infection or carrier state would require a positive HBsAg.

54. A 20 years old patient presents with blood report showing

Hep Bs Ag Negative
Hep B s Ab Positive
Hep B c Ig G Negative
Hep Be Ag Negative
What is her current stage?

A Acute infection

B Carrier state

C Chronic infection

D Recovered state

E Vaccinated

e. Vaccinated 👇

HEPATITIS B SEROLOGY

	HBsAg	HBeAg	Anti-HBs	Anti-HBc
Susceptible	Negative	Negative	Negative	Negative
Vaccinated	Negative	Negative	Positive	Negative
Past Infection	Negative	Negative	Positive	Positive
Acute Infection	Positive	Positive	Negative	IgM Positive
Chronic Infection	Positive	Positive (if replicating) Negative in later chronic phase (If non-replicating).	Negative	IgG Positive

55. A nurse had a needle prick from a hepatitis B positive patient 4 months back. Her Hep B s Ag done recently is negative. What is the single most appropriate test to confirm that she has been infected by the needle prick?

A HB c IgG

B HB c IgM

C HB e Ab

D HB e Ag

E HBs Ab

SOURCE

e. HBs Ab (anti-HBs) is used to confirm immunity against Hepatitis B. Since the nurse had a needle prick from an HBsAg-positive patient but tested negative for HBsAg after 4 months, checking HBs Ab helps determine if she developed immunity (either from prior vaccination or from resolving a past infection). If HBs Ab is positive, it suggests recovery and immunity. If negative, further testing may be needed.

RECOMMENDED POSTEXPOSURE PROPHYLAXIS FOR EXPOSURE TO HEPATITIS B VIRUS - CDC

Vaccination and antibody response status of exposed workers	Treatment		
	Source HBsAg Positive	**Source HBsAg Negative**	**Source Unknown or Not Available for Testing**
Unvaccinated	HBIG x 1 and initiate HB vaccine series	Initiate HB vaccine series	Initiate HB vaccine series
Previously Vaccinated			
Known responder	No treatment	No treatment	No treatment
Known non-responder	HBIG x 1 and initiate revaccination or HBIG x 2	No treatment	If known high-risk source, treat as if source were HBsAg positive
Antibody Response Unknown	Test exposed person for anti-HBs 1. If adequate, no treatment is necessary 2. If inadequate, administer HBIG x 1 and vaccine booster	No treatment	Test exposed person for anti-HBs 1. If adequate, no treatment is necessary 2. If inadequate, administer vaccine booster and recheck titer in 1–2 months

FREE R

56. A 45 years old female presents with intermittent abdominal pain and chronic diarrhea. Her symptoms increase during the days of stress. Her lab workup is normal. Which of the following favors her diagnosis?

A. Family history

B. Intermittent symptoms

C. Liquid stools with blood

D. Nocturnal symptoms

E. Significant weight reduction

b. The patient's presentation is suggestive of Irritable Bowel Syndrome (IBS), which is characterized by intermittent abdominal pain and altered bowel habits, often triggered by stress. IBS typically lacks red flag symptoms such as nocturnal symptoms, weight loss, or bloody diarrhea, which suggest organic pathology like IBD. A family history may play a role but is not as defining as symptom variability.

57. A 55 years old lady comes with vomiting and pain right upper quadrant. Her BMI is 30 kg /m2 and taking HRT for last one year. Her pulse 92/min, B.P=90/60 Temp, 101° F. There is tenderness in right hypochondrium on deep palpation. What is the most appropriate diagnosis?

A. Cholangitis

B. Cholecystitis

C. Hepatitis

D. Liver abscess

E. Pancreatitis

b. The patient's symptoms of right upper quadrant pain, fever (101°F), tenderness on deep palpation (Murphy’s sign), and vomiting strongly suggest acute cholecystitis. Risk factors include obesity (BMI 30) and hormone replacement therapy (HRT), which increase the risk of gallstone formation.

58. A 66 years old diabetic male comes for his routine check up. His BMI-28kg/m2 and takes alcohol 3 units /week. His ultrasound shows multiple gall stones of size more than 1 cm2. What is the most appropriate next step in management?

A. ERCP

B. Laproscopic cholecystectomy

C. Lithotripsy

D. Open cholecystectomy

E. Ursodeoxycholic acid

b. This asymptomatic 66-year-old diabetic male with gallstones >1 cm should undergo elective laparoscopic cholecystectomy due to his increased risk of complications like cholecystitis, cholangitis, or gallstone pancreatitis.

59. A 37 years old male present with severe epigastric pain radiating to back since one hour which is worse on lying down. He is feeling nausea. He drinks 4 units of alcohol per day. His pulse is =110/min, B.P is 100/60, temp 100° F. What is the single most specific diagnostic test?

A. Amylase

B. ERCP

C. LDH

D. Lipase

E. Ultrasound

d. This patient has acute pancreatitis, most likely due to alcohol use (common cause). Serum lipase is the most specific test for acute pancreatitis. It rises earlier than amylase and remains elevated longer.

60. A 25 year old school teacher presents with nausea, vomiting, anorexia and right upper quadrant pain for the past 3 days. Two of the students in her class have come down with similar ymptoms. Her pulse is 100/min, BP 110/70, respirations 18, temperature 101° F. Her sclera are icteric, her liver edge is tender. Her SGPT is 1440 (normal <55).

What is the single most appropriate treatment in her case?

A. Immunoglobulins

B. Interferon

C. Ribavirine

D. Silimyrin (Hepamerz)

E. Supportive treatment

e. This patient likely has acute hepatitis A, indicated by prodromal symptoms (nausea, vomiting, anorexia, fever), right upper quadrant pain, jaundice (icteric sclera), markedly elevated SGPT (1440), and a history of similar cases in her students, suggesting a fecal-oral outbreak. Hepatitis A is self-limiting, requiring only supportive care with hydration and symptomatic relief. Immunoglobulins are for post-exposure prophylaxis, interferon and ribavirin are for chronic hepatitis B or C, and silymarin has no proven benefit.

MOCK 2

1. In study conducted in a hospital in which from the medical records it is evaluated that people who were using drug B had relative risk reduction of 55% as compared to controls.

What type of study is this?

A Experimental

B Longitudinal

C Prevalence

D Prospective

E Retrospective

e. This study evaluates past medical records to determine the effect of drug B on outcomes. Since the data is collected after events have already occurred, it is a **retrospective study**. It is not experimental because there is no active intervention or randomization, and it does not assess prevalence, as it focuses on risk reduction rather than disease frequency at a single point in time.

2. A drug C is used in group of people and it is found that Experimental Event Rate is 30 % Which Control Event Rate is 10%. What is absolute risk reduction?

A 10%

B 15%

C 20%

D 25%

E 30%

c. Absolute Risk Reduction (ARR) is calculated using the formula:
ARR=Control Event Rate (CER)−Experimental Event Rate (EER)
Given:
EER = 30% (0.30)
CER = 10% (0.10)
ARR=0.10−0.30=−0.20 or −20%
Since ARR cannot be negative, this means the drug increased the event rate rather than reducing it. This suggests a potential harmful effect rather than a benefit.

3. In a study it is found that with an intervention "D" the Experimental Event Rate is 45% and Control Event Rate is 90%. What is relative risk reduction in this case?

A 33%

B 45%

C 50%

D 55%

E 100%

c. Relatie Risk Reduction (RRR) is calculated using the formula:
ARR=Control Event Rate (CER)−Experimental Event Rate (EER)/ Control Event Rate (CER)
Given:
EER = 45% (0.45)
CER = 90% (0.90)

RRR=0.90−0.45/0.90=−0.50 or 50%

4. From the given 2 x 2 table, calculate the sensitivity of the test.

	Disease present	Disease absent
Test positive	50	40
Test negative	10	30

A 93%

B 83%

C 73%

D 63%

E 53%

b. Sensitivity = TP/TP+FN

50/50+10x 100 = 83%

5. From the given 2 X 2 table, what is the specificity of the test in this case?

	Disease present	Disease absent
Test positive	50	40
Test negative	10	30

A 62%

B 52%

C 42%

D 32%

E 22%

c. Specificity = TN/TN+FPx100

30/30+40x100= 42%

6. From the given 2 X 2 table, what is the positive predictive value in the same case?

	Disease present	Disease absent
Test positive	50	40
Test negative	10	30

A 85%

B 75%

C 65%

D 55%

E 45%

d. PPV= TP/TP+TNx100

50/40+50x100= 55%

7. From the given 2 X 2 table, what is the negative predictive value of the test?

	Disease present	Disease absent
Test positive	50	40
Test negative	10	30

A 95%

B 85%

C 75%

D 65%

E 55%

c. NPV= TN/TN+FN

30/30+10x100=75%

8. In a screening program cervical screening of all of females above the age of 35 years is done to detect and treat cervical cancer. This is the example of which of the following?

A Primary prevention

B Prophylactic surgery

C Radical prevention

D Secondary prevention

E Tertiary prevention

d. Secondary prevention involves early detection and treatment of diseases to prevent progression or complications. Cervical screening aims to identify cervical cancer or precancerous lesions early, making it a classic example of secondary prevention.

9. In a cohort study, 20% of the intervention group developed adverse effects while 10% of control group developed the adverse effects. What is the odds ratio?

A 0.5

B 1.0

C 2.0

D 2.5

E 1.5

c. Odds = Probablility of event/1-probability of event,
so odds in intervention group= 20%(0.20)/1-0.20= 0.25
while odds in control group = 10% (0.10)/1-0.10= 0.111
Odds ratio= Odds in Intervention group/ Odds in Control Group
So, odds ratio = 0.25/0.111= 2.25 (Roughly 2)

10. The occurrence of new cases of disease over a period of time in a population is defined as:

A Endemic

B Epidemic

C Incidence

D Prevalence

E Risk Ratio

c. Incidence refers to the occurrence of new cases of a disease in a specific population over a defined period of time. It measures how quickly new cases develop, distinguishing it from prevalence, which measures all existing cases (new and old) at a particular point in time.

11. A 27 years old female presents with increased thirst & urination for the last 1 week. She is taking 1200 mg/day of lithium for her bipolar disorder. She has lost 5 lbs weight in the last week.

What would be the appropriate diagnosis?

A Acute renal failure

B Diabetes inspidus

C Diabetes mellitus

D Hyperthyroidism

E Psychogenic urination

b. Lithium use is a well-known cause of nephrogenic diabetes insipidus. It impairs the kidney's ability to concentrate urine, leading to excessive thirst (polydipsia) and urination (polyuria). The rapid weight loss is likely due to dehydration from fluid loss. Diabetes mellitus and hyperthyroidism can cause similar symptoms, but they are not commonly associated with lithium use, and psychogenic urination does not typically cause significant weight loss.

12. A 70 years old hypothyroid patient is taking thyroxin 25 ug from last 2 months. He is a known patient of ischemic heart disease. What drug will you add to prevent him from angina?

A Amlodipine

B Clopidogrel

C Lisinopril

D Propranolol

E Isosorbide

d. In a hypothyroid patient with ischemic heart disease, starting thyroxine may increase the metabolic rate and cardiac workload, potentially triggering angina. Propranolol, a non-selective beta-blocker, reduces heart rate and myocardial oxygen demand, making it an appropriate choice to prevent angina. Other options like amlodipine and isosorbide can relieve angina but are not primarily used for prevention in this scenario. Clopidogrel is an antiplatelet agent and does not address angina directly, and lisinopril is for blood pressure or heart failure management.

13. An asthmatic patient presents with tachycardia of 140 b/min from last 2 days. What is the drug of choice for his tachycardia?

A. Adenosine

B. Amoidarone

C. Digoxin

D. Diltiazem

E. Propranolol

d. In an asthmatic patient with tachycardia, diltiazem, a calcium channel blocker, is a suitable option as it slows the heart rate by reducing conduction through the AV node without causing bronchospasm. Propranolol, a non-selective beta-blocker, should be avoided as it can worsen asthma by causing bronchoconstriction. Adenosine is used for supraventricular tachycardia but is not the first choice here. Amiodarone is primarily for ventricular arrhythmias or refractory cases. Digoxin is not typically used for acute rate control in tachycardia.

14. A 30 year old female presents with fever, night sweats and weight loss for the last 3 months. Her X-ray shows fibrocavitatory lesions at right apex. She has been started on 4 drugs ATT regimen. She is also on combined oral contraceptive pills since last 1 year.

What would be the most appropriate step in management?
A Change to progesterone only pills

B Continue same dose of COC

C Decrease dose of COC

D Increase dose of COC

E Stop COC pills

d. Rifampin, a key drug in the 4-drug anti-tuberculosis (ATT) regimen, induces hepatic enzymes, which can significantly reduce the efficacy of combined oral contraceptive pills (COC) by increasing the metabolism of estrogen and progesterone. Therefore, increasing dsoe is most appropriate.

15. A 25 years old, known patient of Hepatitis C is taking interferon & ribavirin for last 3 months. He is complaining of weakness, sore throat and perianal rash for the last 1 week.

What is the most appropriate diagnostic test for his current problem?
A Chest X-ray (PA view)

B Complete Blood Count

C C-reactive protein (CRP)

D Liver function tests

E Thyroid Stimulating Hormone

b. The patient's symptoms of weakness, sore throat, and perianal rash while on interferon and ribavirin suggest possible bone marrow suppression, a known side effect of these medications. A complete blood count (CBC) will help detect anemia, leukopenia, or thrombocytopenia, which could explain the symptoms. Monitoring blood counts is essential in patients on interferon and ribavirin therapy to prevent complications. Other tests (e.g., CRP, LFTs) are less relevant for this presentation.

16. A 30 years old female presents with a bleeding wound on her leg after road traffic accident. She was given tetanus immunoglobulin and tetanus toxoid. She asks you about her MMR vaccination.

When will advise MMR vaccine for her?
A After 4 weeks

B After 8 weeks

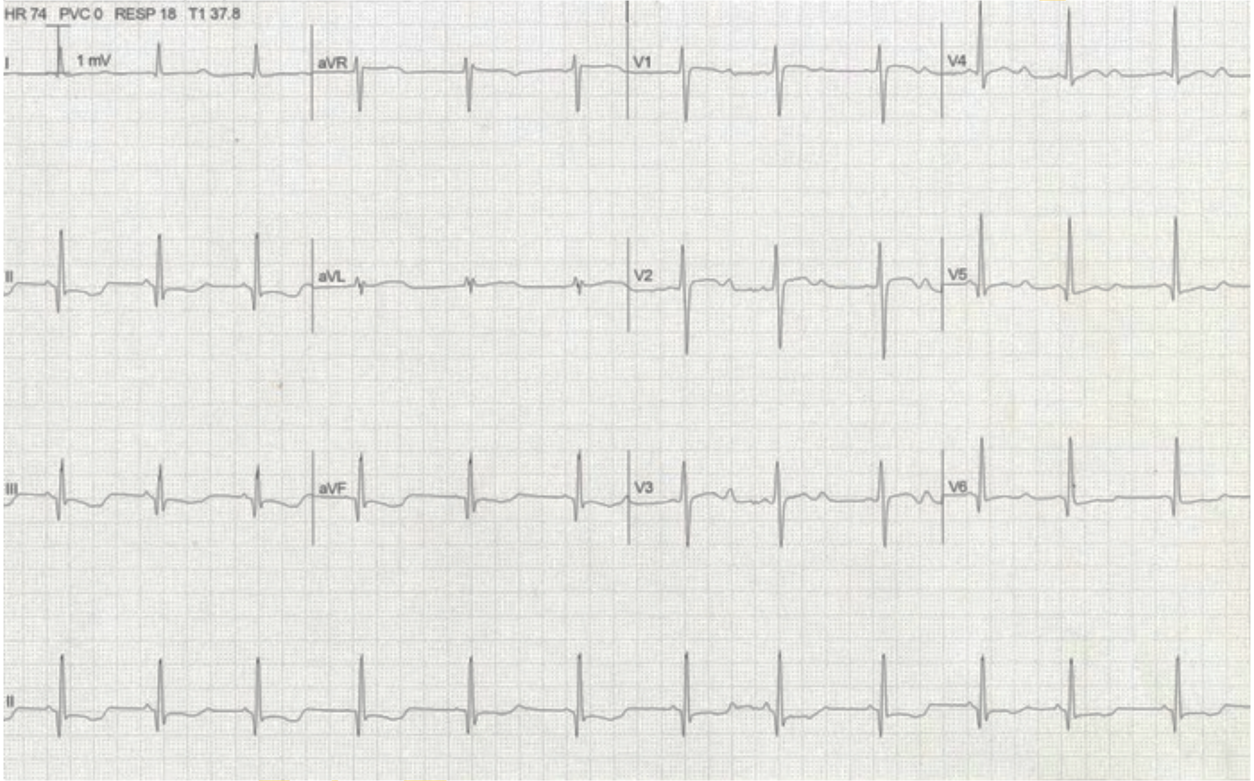
C After 12 weeks

D After 16 weeks

E After 20 weeks

a. Live vaccines like MMR should be administered at least 4 weeks after the administration of tetanus immunoglobulin (TIG). This is because the antibodies in the immunoglobulin may interfere with the response to the live vaccine if given earlier. Therefore, the MMR vaccine can be safely administered 4 weeks after the tetanus immunoglobulin.

17. A 30 years old schizophrenic patient, who is taking risperidone for last three months, presents with palpitations. His ECG shows



What is the most specific ECG finding in his case?

A Broad QRS Complex

B Decreased PR interval

C Premature ventricular contractions

D Prolonged QT interval

E ST segment depression

d. Risperidone is associated with the potential to prolong the QT interval, increasing the risk of arrhythmias such as torsades de pointes. The QT interval prolongation can be visualized on the ECG and is a common side effect of many antipsychotics, including risperidone. Other findings such as broad QRS complex or ST segment changes are less commonly associated with this medication. Regular ECG monitoring is essential for patients on medications that can affect the QT interval.

18. 30 years patient presents with attack of migraine for last 2 days. You give him analgesic and two doses of sumatriptan but no relief. Now you want to give him ergotamine for pain relief. How long after taking Samaritan you will give him ergotamine?

A 2 hrs

B 4 hrs

C 6 hrs

D 8 hrs

E 10 hrs

c. There should be a minimum gap of 6 hours between administering sumatriptan and ergotamine to avoid the risk of additive vasoconstrictive effects, which can lead to severe ischemic complications like coronary vasospasm. Both drugs act on serotonin receptors and can cause significant vasoconstriction, so spacing their administration is critical for patient safety.

19. A 40 years known hypertensive female patient presents with flushing from last 1 week. She is taking Captopril, Propranolol, Amlodipine, aspirin & Spironolactone from last 1 month Which drug is responsible for her problem?

A Amlodipine

B Aspirin

C Captopril

D Propranolol

E Spironolactone

a. Amlodipine, a calcium channel blocker, is a common cause of flushing due to its vasodilatory effects. It relaxes vascular smooth muscle, leading to peripheral vasodilation, which can result in flushing. None of the other drugs listed (aspirin, captopril, propranolol, or spironolactone) typically cause flushing as a common side effect.

20. A known patient of Parkinson's disease presents with dyspnea & persistent cough. He is taking bromocriptine, levodopa, carbidopa, amantadine and procyclidine.

Which drug is responsible for his problem?
A Amantadine

B Bromocriptine

C Carbidopa

D Levodopa

E Procyclidine

b. Bromocriptine, a dopamine agonist, can cause pulmonary fibrosis as a rare but serious side effect. This may present as dyspnea and a persistent cough in patients with Parkinson's disease. If these symptoms occur, bromocriptine should be discontinued, and further evaluation (e.g., chest X-ray or CT scan) should be performed to confirm pulmonary involvement. Other drugs listed (amantadine, levodopa, carbidopa, or procyclidine) are less likely to cause this issue.

21. A 30 years lactating mother develops hyperthyroidism. She has lost 10 Kg and has severe diarrhea, palpitations and intolerance. Her pulse is 120 BPM. She wants to continue breast feeding her 3 months old baby. What is the single best treatment option for her?

A Carbimazole

B Propranolol

C Propylthiouracil

D Radioactive iodine

E Subtotal thyroidectomy

c. Propylthiouracil (PTU) is preferred in lactating mothers with hyperthyroidism because it has minimal transfer into breast milk compared to carbimazole. It effectively reduces thyroid hormone levels and is safe for breastfeeding. Carbimazole may also be used but is considered second-line in this scenario. Propranolol can control symptoms like palpitations but does not address the underlying hyperthyroidism. Radioactive iodine and subtotal thyroidectomy are not suitable for lactating mothers due to risks to the baby and the invasiveness of the procedures.

22. A 55 years old patient of osteoporosis pesents with hot flushes for 2 months. She is taking Calcotonin, Raloxifene, Ibuprofen, Calcium & Vit D supplementation.

Which drug is responsible for her problem?
A Calcitonin

B Calcium C Ibuprofen

D Raloxifene

E Vit D

d. Raloxifene, a selective estrogen receptor modulator (SERM), is commonly associated with hot flushes as a side effect. It acts as an estrogen antagonist in certain tissues, such as the hypothalamus, which can trigger menopausal-like symptoms like hot flushes. Other drugs listed, such as calcitonin, calcium, vitamin D, or ibuprofen, are not known to cause hot flushes.

23. A 30 years female presents with pain and distension of abdomen for the last 1 month. She has been taking Clomiphene citrate regularly for the last 1 year without medical advice for her infertility. Ultrasound shows a pelvic mass. What is the most likely diagnosis?

A Cervical cancer

B Endometrial cancer

C Fallopian tube cancer

D Ovarian cancer

E Uterine leiomyoma

d. Prolonged use of clomiphene citrate without medical supervision has been associated with an increased risk of ovarian cancer, particularly in women who do not conceive after extended use. The symptoms of abdominal pain, distension, and the presence of a pelvic mass on ultrasound are consistent with ovarian cancer. Other conditions, such as cervical cancer, endometrial cancer, or uterine leiomyoma, are less likely to present with this combination of findings.

24. An 18 years old cocaine addict has been brought by relatives in an agitated state. He snorted cocaine 12 hours ago. He is abusive and violent. Which drug would you prescribe in order to sedate him?

A. Flumazenil

B. Haloperidol

C. Lorazepam

D. Methadone

E. Naloxone

c. In a patient presenting with agitation and violence due to cocaine intoxication, benzodiazepines like lorazepam are the first-line treatment to control agitation, anxiety, and seizures. They help by calming the patient and reducing the sympathetic overdrive caused by cocaine. Haloperidol can be used if psychotic symptoms are present, but it should be used cautiously due to the risk of lowering the seizure threshold. Flumazenil is a benzodiazepine antagonist and is not appropriate here. Naloxone is for opioid overdose, and methadone is used for opioid dependence, not for cocaine intoxication.

25. A 55 years old teacher came with compliant of sexual dysfunction six weeks after starting of fluoxetine for his depression.

Which one of the following might be the most useful alternate for him?

A. Citalopram

B. Escitalopram

C. Fluoxamine

D. Mirtazapine

E. Sertaline

d. Mirtazapine is an antidepressant with a different mechanism of action (a noradrenergic and specific serotonergic antidepressant) that has a lower risk of causing sexual dysfunction compared to SSRIs like fluoxetine, citalopram, escitalopram, and sertraline. Switching to mirtazapine can help alleviate depression while minimizing sexual side effects. The other options are SSRIs, which are more likely to continue causing sexual dysfunction.

26. A 51 year old chronically depressed patient presents with low back pain radiating to her left leg since last 3 weeks. She is also having narrow angle glaucoma. Her physical examination and laboratory tests are unremarkable

Which of the following drug might be useful in this patient?

A. Amitryptaline

B. Carbamezapine

C. Duloxetine

D. Mirtazapine

E. Phenelzine

c. Duloxetine is a serotonin-norepinephrine reuptake inhibitor (SNRI) that is effective for both chronic pain (e.g., neuropathic pain) and depression, making it an excellent choice for this patient with low back pain radiating to the leg and chronic depression. Additionally, duloxetine does not have anticholinergic effects, so it is safe in patients with narrow-angle glaucoma, unlike amitriptyline or other tricyclic antidepressants. Other options, such as carbamazepine, are used for neuropathic pain but are not antidepressants, and phenelzine and mirtazapine do not address both conditions simultaneously.

27. A 35 year old schizophrenic patient presents with fever, sore throat and mouth ulcers after taking antipsychotic drug prescribed by a psychiatrist. His CBC show decreased leucocytes.

Which of the following is likely to cause this effect?

A. Chlorpromazine

B. Clozapine

C. Halloparidol

D. Olanzapine

E. Risperidone

b. Clozapine is known to cause agranulocytosis, a severe reduction in white blood cell count, which can lead to fever, sore throat, and mouth ulcers due to an increased risk of infections. Regular CBC monitoring is required for patients on clozapine to detect agranulocytosis early. Other antipsychotics (chlorpromazine, haloperidol, olanzapine, risperidone) do not commonly cause this severe hematologic side effect.

28. A 65 years old patient of prostatic cancer comes with bone pains which were previously well managed by morphine pump. However he has become tolerant to morphine and further increase in dose causes severe constipation. Which of the following mighty be used to alleviate his pain?

A. Bupronorphine

B. Codeine

C. Fentanyl

D. Meperidine

E. Methadone

c. Fentanyl is a strong opioid analgesic that is useful in patients who have developed tolerance to morphine. It is a potent opioid with a different receptor binding profile, making it effective for opioid rotation in cancer pain management. Additionally, it causes less constipation compared to morphine.

29. A 30 years old patient of grand mal seizures is using some medicine for this problem form the last 6 months. He complains of nausea, weight gain, and hair loss.

Which of the following medicine he is most likely using?
A. Carbamazepine

B. Clonazepam

C. Ethosuximide

D. Phenobarbitone

E. Valproic acid

e. Valproic acid is commonly used for grand mal (generalized tonic-clonic) seizures and is associated with nausea, weight gain, and hair loss (alopecia) as side effects.

30. A 57 years old man is being treated for his arrhythmias. He complains of weight gain, dry skin, leg edema.

Which of the following antiarrhythmic drug is most likely the cause?
A. Amiodarone

B. Procainamide

C. Propranolol

D. Quinidine

E. Verapamil

a. Amiodarone is an antiarrhythmic drug that can cause hypothyroidism, leading to symptoms such as weight gain, dry skin, and leg edema. It contains iodine and can disrupt thyroid function, causing either hypothyroidism (more common) or hyperthyroidism.

31. A child with asthma is being effectively treated with an inhaled beclomethasone.

Which of the following is the most important concern?

A. Cataract formation

B. Cushing syndrome

C. Excessive hair growth

D. Growth suppression

E. Hypoglycemic attack

d. Side effects of oral and high-dose inhaled steroids - Growth suppression in children OHGP 5th Ed Page 276

32. Which of the following drug has the narrowest therapeutic window and an overdose may cause seizures or potentially fetal arrhythmias?

A. Aminoglycosides

B. Amphotericin

C. Digoxin

D. Macrolides

E. Theophylline

e. here are many causes of nonepileptic seizures: These are divided into the following categories: Drug intoxication: cocaine, dextroamphetamine, **theophylline**, isoniazid, lithium, nitrous oxide anesthesia, and acetylcholinesterase inhibitor. Swanson Family Medicine Review 9thg Ed Page 294

33. Which of the following agents interferes with most of the cytochrome P450 enzymes and thus leads to many drug interactions?

A. Cimetidine

B. Domperidone

C. Famotidine

D. Omeprazole

E. Sucralfate

a. Cimetidine is a potent inhibitor of cytochrome P450 (CYP) enzymes, leading to many drug interactions. It can increase the levels of drugs metabolized by CYP enzymes, such as warfarin, phenytoin, and theophylline, potentially leading to toxicity.

34. In which of the following clinical situation the prophylactic use of antibiotics is not required?

A. Prevention of meningitis in close contacts with infected patients.

B. Patient with hip prosthesis who is having a tooth removed.

C. Patient who complains of frequent respiratory infections

D. Pre surgical treatment in gastrointestinal procedures.

E. Patient who had Rheumatic fever want the IUCD insertion.

c. Prophylactic antibiotics are not routinely recommended for frequent respiratory infections as they do not prevent viral infections and can lead to antibiotic resistance. However, prophylaxis is used in cases such as meningitis contacts, surgical procedures, and certain high-risk patients & to prevent infections.

35. Society of gastroenterology recommended that pegylated interferon with Ribavirin is more effective in treating Hepatitis C patients. Which level of evidence this statement indicates?

A. Ia

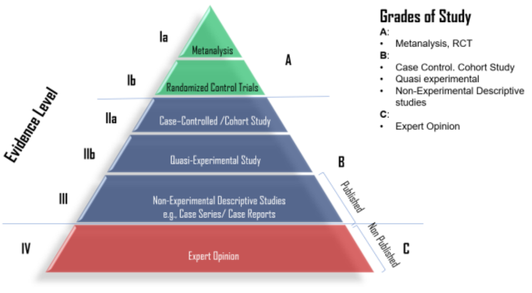
B. Ib

C. II

D. III

E. IV

e. Medical Society recommendation is IV.


Evidence Level
Ia
Ib
IIa
IIb
III
IV
Metanalysis
Randomized Control Trials
Case-Controlled /Cohort Study
Quasi-Experimental Study
Non-Experimental Descriptive Studies e.g., Case Series/ Case Reports
Expert Opinion
A
B
C
Published
Non Published
Grades of Study
A:
Metanalysis, RCT
B:
Case Control. Cohort Study
Quasi experimental
Non-Experimental Descriptive studies
C:
Expert Opinion

RESEARCH PYRAMID

36. Health department release special notification for hygiene and eating habits before the epidemic of cholera.

What type of prevention is this?

A. Chemoprophylaxis

B. Health promotion

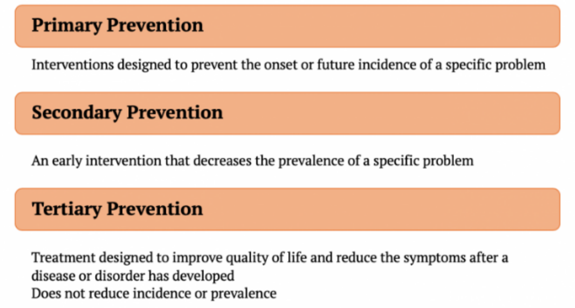
C. Primary prevention

D. Secondary Prevention

E. Tertiary prevention

c. **Primary** – Don't let the disease happen (Using Mask, Handwashing, Immunization
Secondary – Diagnosing Disease early (Screening tests like Pap Smear, Mammography. Also, after exposure – PEP like immunoglobulins administration in Rabies in post prick of needles is also secondary)
Tertiary – Preventing complications after disease has happened (Diabetic Foot Care, Lifestyle modification with Diseased people like walk in diabetics is also its example)
Quaternary Prevention – Rehabilitation

Chloroquine use in Malaria before travelling to endemic areas is **Chemoprophylaxis**.



Primary Prevention

Interventions designed to prevent the onset or future incidence of a specific problem

Secondary Prevention

An early intervention that decreases the prevalence of a specific problem

Tertiary Prevention

Treatment designed to improve quality of life and reduce the symptoms after a disease or disorder has developed
Does not reduce incidence or prevalence

37. A 80 years old patient has a fracture of femur neck and is bedridden. Surgeon refused to operate due to ill health. You advised them good nursing care.

What type of prevention it is?
A. Chemoprophylaxis

B. Palliative care

C. Primary prevention

D. Secondary Prevention

E. Tertiary prevention

b. Palliation is the option in old age where complete cure isn't possible.

38. Wilson jungner's criteria is a useful tool in health care system. Which this of the following false about it?

A. Condition should be an important heath problem

B. Disease is detectable at early stage.

C. Suitable test to detect at early stage.

D. Suitable to detect late stage of disease.

E. Risks both Physical & Psychological benefits

d. Wilson and Jungner's criteria focus on screening for diseases in their early stages, where intervention can prevent progression and improve outcomes. Screening is not aimed at detecting late-stage disease, as treatment is usually less effective at that point.
The Wilson–Jungner criteria: All screening tests should meet the following criteria before they are introduced to the target population:

- The condition being screened for is an important health problem
- Natural history of the condition is well understood
- There is a detectable early stage
- Treatment at early stage is of more benefit than at late stage
- There is a suitable test to detect early-stage disease
- The test is acceptable to the target population
- Intervals for repeating the test have been determined
- Adequate health service provision has been made for the extra clinical workload resulting from screening
- Risks, both physical and psychological, are < benefits
- Costs are worthwhile in relation to benefits gained. OHGP 5th Ed Page 144

E RESOURCE

39. The proportion of disease-free patients in whom a test result is also negative is referred to as:

A Negative Predictive Value

B Positive Predictive Value

C Relative Risk

D Sensitivity

E Specificity

e. Specificity is defined as the proportion of people without the disease who have a negative test result. Swanson Family medicine Review 9th Ed Page 9

40. The proportion of patients with disease in whom a test result is positive is referred to as:

A Negative Predictive Value

B Positive Predictive Value

C Relative Risk

D Sensitivity

E Specificity

d. Sensitivity is defined as the proportion of people with the disease who have a positive test result. Swanson Family medicine Review 9th Ed Page 8

41. The ability of the test to give same result after repeated application / use is called?

A Positive predictive value

B Reliability

C Specificity

D The p value

E Validity

b. Reliability is the extent to which repeated measurements of a relatively stable phenomenon fall close to each other. Reproducibility and precision are other words for this characteristic. Swanson Family medicine Review 9th Ed Page 10

42. 100 people in a certain group were screened for hypertension and 50 were found to have hypertension. Out of those who had hypertension, 10 had CVA and out of those who didn't have hypertension 2 had CVA.

What is the relative risk of CVA in hypertension in this data?

A 1%

B 4%

C 6%

D 10%

E 16%

		Exposure	
		Exposed	*Non - Exposed*
Outcome	*Yes*	a (10)	b (2)
	No	c (40)	d (48)

Outcome rate exposed = a/a+c= 0.2 Outcome rate Non exposed = b/b+d= 0.04
Relative Risk = Outcome rate exposed/ Outcome rate Non exposed = 5% (Option B)

43. You survey a village of 1000 population. The total number of hypertensive during survey was 20. Which of the following terms correctly describes above result?

A Event rate

B Incidence

C Odds ratio

D Prevalence

E Relative risk

RCE

d. Prevalence is defined as the fraction (proportion) of a population with a clinical condition at a given point in time. Prevalence is measured by surveying a defined population in which some patients have and some patients do not have the condition of interest at a single point in time.
Incidence in relation to a population is defined as the fraction (proportion) initially free of a disease or condition that go on to develop it during a given period. Swanson Family medicine Review 9th Ed Page 11

واقعات:(Incidence)

کسی بیماری یا حالت کے نئے کیسز کی تعداد جو ایک مخصوص مدت کے دوران کسی خاص آبادی میں ظاہر ہوتی ہے۔

پھیلاؤ:(Prevalence)

کسی بیماری یا حالت کے تمام کیسز (نئے اور پرانے) کی تعداد جو کسی خاص وقت یا مدت میں کسی خاص آبادی میں موجود ہو۔

مثال:

واقعات : اگر ایک سال کے دوران 100 افراد کو ذیابیطس ہوا، تو یہ واقعات ہیں۔

پھیلاؤ : اگر کسی خاص وقت پر کل 500 افراد کو ذیابیطس ہے، تو یہ پھیلاؤ ہے۔

Incidence = New cases over time.
Prevalence = Total cases at a point in time.

44. A new diagnostic blood test for pulmonary embolus has been described. Out of all patients tested negative the numbers of patient who are actually negative, is called?

A Negative predictive value

B Odds ratio

C Positive predictive value

D Sensitivity

E Specificity

FR

a. NPV is defined as the probability of not having the disease when the test result is negative. It is the proportion of people with a negative test that are TNs. Swanson Family medicine Review 9th Ed Page 9

45. You conducted a study on prevalence of diarrhea in a community. The data collector was a young lady and was shy to ask questions from young men. She asked questions from older people only and omitted young males. What is this factor called?

A Bias

B Confounder

C Degree of Freedom

D Standard Error of the mean

E Null hypothesis

a. This situation describes selection bias, where certain groups (young males) are systematically excluded from the study, leading to inaccurate or non-representative results. Bias affects the validity of the study findings.

46. A ship containing crude oil has sunken near the shore and toxic fumes are present in the air. The health authorities ask you to study the effect of toxic fumes on the lungs of the people. Which type of study design would be most appropriate for the research?

A Case control

B Case series

C Cohort

D Cross sectional survey

E Experimental

c. A cohort study is the best choice for assessing the effect of toxic fumes on lung health. In this design, a group of exposed individuals (those near the shore inhaling toxic fumes) and a control group (unexposed individuals) are followed over time to observe the development of lung diseases or other health effects.

47. The Chief Minister asks to find out the prevalence of diabetes among government employees. You randomly selected 1000 persons and checked their blood sugar. The average FBS of 1000 employees is 130 mg/dl. What is this blood sugar reading called?

A Level of significance

B Mean

C Median

D Mode

E Prevalence

b. The mean is the average value calculated by summing all values and dividing by the total number of values. In this case, the mean fasting blood sugar (FBS) of the 1000 employees is 130 mg/dl, making it the correct statistical measure.

48. In general practice doctors should be aware of themselves. They should get ready before each patient and take every patient as a new patient. Which model of consultation describes this?
A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

b. Neighbour, 1987 - The Inner Consultation. Checkpoints: Connecting—doctor establishes rapport with the patient, Summarizing—doctor clarifies the patient's reason for consulting, Handing over—doctor/patient negotiate and agree a management plan, Safety netting—planning for the unexpected; managing uncertainty, Housekeeping—doctor is aware of his/her own emotions. OHGP 5th Ed Page 63

49. A diabetic patient comes to the doctor with nail infection. The doctor manages his infection first, then diabetes, takes this opportunity to advise exercise and also tries to change the health seeking behavior.

Which model of consultation describes this?
A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

e. Stott and Davis, 1979 - Exceptional potential of the consultation. 4 tasks: Management of presenting problems, Management of continuing problems, Modification of help-seeking behaviour, Opportunistic health promotion. OHGP 5th Ed Page 62

50. A diabetic patient comes to the doctor with nail infection. The doctor manages the nail infection, finds out patient's understanding about diabetes and infection. He educates the patient and encourages the patient to take responsibility of He checks diet, exercise, weight control. patient's understanding and also asks for his agreement

Which model of consultation describes this?
A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

c. Pendleton et al., 1984 - The doctor's tasks: Define the reason for patient's attendance, Consider other problems—continuing problems and risk factors, Choose an appropriate action for each problem—involves negotiation between doctor and patient, Achieve a shared understanding of the problem between doctor/patient, Involve the patient in the management and encourage the patient to accept appropriate responsibility, Use time and resources appropriately, Establish and maintain a relationship between doctor and patient. OHGP 5th Ed Page 63

51. A diabetic patient comes to the doctor with nail infection. The doctor collects all information about infection and diabetes, examines patient, makes a diagnosis, negotiates a management plan, orders test and also advises pneumococcal vaccine as preventive measure. He documents all this in patient's file?

Which model of consultation is he following?
A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

a. Fraser, 1992 and 1999 - Areas of competence: Interviewing and history taking, Physical examination, Diagnosis and problem-solving, Patient management, Relating to patients, Anticipatory care, Record-keeping. OHGP 5th Ed Page 63

52. Consultation has 4 potentials and one of them is opportunistic heath promotion.

Which model of consultation describes this?
A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

e. The Stott and Davis model of consultation describes four key areas of consultation, one of which is opportunistic health promotion. This means using the consultation as an opportunity to educate the patient on preventive health measures, such as lifestyle modifications, vaccinations, and screening programs. OHGP 5th Ed Page 62

53. When patients come to doctors, they have a main reason to see the doctor. Which model of consultation describes this?

A Fraser

B Neighbor

C Pendleton

D RCGP

E Stott and Davis

c. Pendleton's consultation model emphasizes understanding the patient’s main reason for consultation, exploring their concerns, expectations, and the impact of the illness on their life. It focuses on a patient-centered approach and shared decision-making. OHGP 5th Ed Page 63

54. A 65 years old male patient of multiple myeloma complains of severe body pains. He is taking Ibuprofen but no relief.

Which is the single most appropriate next step?
A IM Vitamin D

B Intranasal Calcitonin

C IV Bisphosphonate

D IV Calcium Gluconate

E IV Dexamethasone

c. Bone pain(Deep gnawing pain. Worse on moving/weight bearing) - Try NSAIDs and/or strong opioids, Consider referral for palliative radiotherapy, strontium treatment (prostate cancer), or IVbisphosphonates (↓ pain in myeloma, breast, and prostate cancer), Refer to orthopaedics if any lytic metastases at risk of fracture, for consideration of pinning. OHGP 5th Ed Page 1015

55. A 60 year old patient of Hodgkin's lymphoma complains of severe shooting pain in his right arm and forearm for the last one month. He has a large rubbery lymph node in his right axilla pressing on brachial plexus.

Which one is the single best treatment option for his pain?
A Amitryptaline

B Dexamethasone

C Gabapentine

D Paracetamol

E Tramadol

b. Neuropathic pain(Burning/shooting pain associated with altered sensation) - Usually only partially responsive to opioids—titrate to the maximum tolerated dose, If inadequate, add a neuropathic agent, e.g. amitriptyline 10–25mg nocte—↑ as needed every 2wk to 75–150mg. Alternatives: gabapentin, pregabalin, duloxetine, or clonazepam, **If pain is due to nerve compression resulting from tumour, dexamethasone 4–8mg od may help**, Other options: TENS; nerve block; topical lidocaine patches; specialist treatment options, e.g. ketamine. OHGP 5th Ed Page 1015

56. A 60 year old male complains of intractable pain in the right hypo chordrium for the last 2 months. He is suffering from inoperable hepatocelluar carcinoma.

What is the single best treatment option for him?
A Dexamethasone

B Hyoscine bromide

C Loperamide

D Magnesium hydroxide

E Silimyrin

a. Liver capsule pain Dexamethasone 4–8mg/d. Titrate dose to control pain. Alternatively try NSAID + proton pump inhibitor cover. OHGP 5th Ed Page 1015

57. A 25 years old patient of non Hodgkin's lymphoma complains of severe vomiting lasing for 5 days after each course of chemotherapy. Which are is the most appropriate treatment option for his vomiting?

A Cyclizine

B Diazepam

C Haloperidol

D Levomepromazine

E Ondansetron

e. Granisetron (1mg bd) or ondansetron (8mg bd PO or 16mg od PR)—chemo- or radiotherapy-induced vomiting. OHGP 5th Ed Page 1017

58. Metaanalysis of randomised controlled trials confirms that Aspirin is useful for the Secondary prevention of CAD.

Which level of evidence this statement indicates?
A Ia

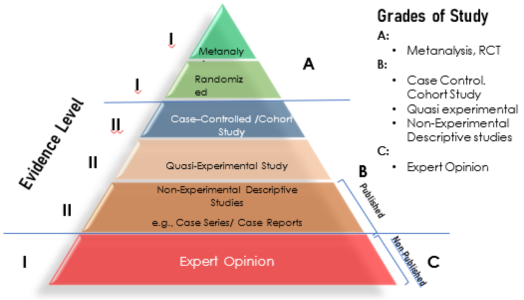
B Ib

C IIa

D IIb

E III

a. Metanalysis. -1a 👇


Evidence Level
I
I
II
II
II
I
Metanaly
Randomiz ed
Case-Controlled /Cohort Study
Quasi-Experimental Study
Non-Experimental Descriptive Studies
e.g., Case Series/ Case Reports
Expert Opinion
A
B
C
Published
Non-Published
Grades of Study
A:
• Metanalysis, RCT
B:
• Case Control. Cohort Study
• Quasi experimental
• Non-Experimental Descriptive studies
C:
• Expert Opinion

Research Pyramid

59. A 50 years old patient of chronic obstructive lung disease presents with fever, body aches, running nose, cough and headache since 1 day. He has just returned from Mexico and some of his Mexican neighbors were suffering from H1N1 influenza infection.

Which of the following is most appropriate drug therapy for him?
A Acyclovir

B Amantidine

C Oseltamivir

D Ribavirin

E Zidovudin

c. Tab Tamiflu (Oseltamavir) 75mg x BD for 5 days

60. H1N1 influenza epidemic has started in your neighboring country and is expected to start in your area after 1 month. What would be the single most appropriate preventive measures at this stage?

A Anti viral drugs

B Face masks

C H1N1 Vaccine

D No measure required

E Strict hand washing

Antibodies take about 1 month to develop so most appropriate is to vaccinate against the disease, if disease is imminent in few days, then face mask and hand washing would be most appropriate

MOCK 3

1. A 45 years Was arrested following abnormal behavior in the streets. He was brought to your clinic for assessment of delusional behavior. During examination he had generalized tonic clonic seizure. What drug may have most likely led to this seizure?

A Amphetamine

B Barbiturate

C Chlorpromazine

D Cocaine

E LSD

b. Amphetamines: tachycardia, mydriasis, agitation, paranoia, and seizures. Swanson Family Medicine Review 9th Ed Pg 774

2. A 25 years old office secretary presents with depression for the two years. She has been brought by her sister because from the last one week, she had grandiore delusions, hyperexcitement, talking loudly and jumping from one topic to another.

What is most likely diagnosis?
A Bipolar disorder

B Depressive psychosis

C Schizoaffective disorder

D Schizophrenia

E Somatization disorder

a. The patient has a history of depression for two years, but now presents with grandiose delusions, hyperexcitement, pressured speech, and flight of ideas, which are characteristic of a manic episode. This indicates Bipolar Disorder, most likely Type I, where episodes of mania and depression alternate.

3. A 30 years old male is being assessed for episodes of hallucinations, delusions & thought disorder. Which of the following is a poor prognostic feature in this condition?

A Acute onset of symptoms

B Early start of treatment

C Good intelligence

D Good social adjustment

E Strong family history

e. In schizophrenia and other psychotic disorders, a family history of schizophrenia or severe mental illness is associated with a worse prognosis, as it suggests a stronger genetic predisposition and a higher likelihood of chronic symptoms. In contrast, factors like acute onset, early treatment, good intelligence, and good social adjustment are associated with a better prognosis.

4. A 25 years old lady has had generalized headache for 6 months. She also had abdominal & knee pain in the past. Her neurological examination is normal & CT scan unremarkable. What could be the most probable diagnosis?

A Conversion disorder

B Hypochondriasis

C Somatization disorder

D Malingering

E Tension headache

c. Somatic Symptom Disorder - Diagnostic clues include multiple physical complaints with onset before the age of 30 years. The tendency is for these complaints to be both chronic and long-standing. The complaints involve each of the following: pain symptoms, gastrointestinal symptoms, sexual dysfunction symptoms, and pseudoneurologic symptoms. Impairment of social or occupational functioning is associated with these symptoms. Swanson Family Medicine Review 9th Ed Pg 748

5. A 37 years old female who was diagnosed with AIDS three years back is unable to work because of physically debility. She has lost interest in daily activities and requests her physician to provide her some medicine to end her life.

What is the most likely diagnosis?
A Bipolar disorder

B Conversion reaction

C Factitious disorder

D Major depressive disorder

E Personality disorder

d. A helpful pneumonic for MDD is "SIG-EM-CAPS," where a diagnosis is made as long as the patient has five of the nine following symptoms with one of the symptoms being energy/fatigue or mood: **S**leep (hypersomnia or insomnia), **I**nterest (lack of interest in general), **G**uilt (or feelings of hopelessness), **E**nergy/fatigue, **M**ood (depressed, sadness), **C**oncentration (lack of), **A**ppetite (increased or decreased with or without weight loss/weight gain), **P**sychomotor (agitation or retardation), **S**uicidal ideation

6. A 27 years old man presents with persistent fatigue, lethargy & irritability following flu like illness twelve month back. Her sleep is disturbed, there are bilateral tender cervical lymph nodes and multiple joint pains. What is the most appropriate management of the patient?

A Behavior therapy

B Cognitive behavior therapy

C Intensive exercise

D Psychoanalysis

E Psychotherapy

b. Chronic fatigue syndrome - Unexplained persistent and/or recurrent fatigue of new/definite onset, not explained by other conditions and resulting in ↓ activity (often starting 1–2d after mental/physical exertion and lasting >24h) and ≥1 of: General malaise, Dizziness/nausea, Palpitations without cardiac dysfunction, Cognitive dysfunction, e.g. impaired concentration/memory, Tender cervical/axillary LNs without enlargement, Physical/mental exertion makes symptoms worse, Headaches of new type, pattern, or severity, Multi-site muscle/joint pain without inflammation, Sore throat,Difficulty with sleeping.
Provide support and reassurance—explanation, information ± self-help groups. Avoid exacerbating factors, e.g. caffeine, alcohol. Advise graded exercise and regular, limited rest

periods (e.g. 30min 4–5×/d). Treat symptoms, e.g. amitriptyline 10–50mg nocte to help sleep ± relieve headache/neuropathic pain; SSRI for depression. Refer adults if severe symptoms, or symptoms persist >6mo. Specialist treatments include **CBT** and rehabilitation programmes. OHGP 5th Ed Page 502

7. A 27 years old man presents with persistent fatigue, lethargy & irritability following flu like illness twelve month back. Her sleep is disturbed, there are bilateral tender cervical lymph nodes and multiple joint pains. What is the most appropriate management of the patient?

A Amitriptyline

B Duloxetin

C Fluoxetene

D Phenelzine

E Venlafaxine

a. Provide support and reassurance—explanation, information ± self-help groups. Avoid exacerbating factors, e.g. caffeine, alcohol. Advise graded exercise and regular, limited rest periods (e.g. 30min 4–5×/d). Treat symptoms, e.g. amitriptyline 10–50mg nocte to help sleep ± relieve headache/neuropathic pain; SSRI for depression. Refer adults if severe symptoms, or symptoms persist >6mo. Specialist treatments include **CBT** and rehabilitation programmes. OHGP 5th Ed Page 502

8. 42 years old teacher presents with lethargy and weakness during her daily activities. Her appetite has decreased and now she feels irritable during the daytime. She wakes up very early in the morning. Which of the following factors support a good prognosis?

A Death of mother prior to 12 years of age

B Husband with multiple sclerosis

C Obsessional personality

D Previous depressive illness

E Working with charitable organizations

e. Engagement in social and meaningful activities is associated with better coping mechanisms, improved self-esteem, and social support, all of which contribute to a better prognosis in depression.

9. A 25 years old woman constantly washes her hands because of fear of infection, even at times. where she has not touched anything.

What is the most appropriate treatment?
A Alprazolam

B Amitriptyline

C Buspirone

D Escitalopram

E Lithium sulphate

d. OCD Management: Mild functional impairment Offer short CBT (<10h) including exposure–response prevention (ERP) or group therapy
Moderate functional impairment Offer more intensive CBT (>10h) or drug therapy (SSRI, e.g. fluoxetine 20–40mg od)

Severe functional impairment Offer psychological therapy + drug treatment. If inadequate response at 12wk, offer a different SSRI or clomipramine. Refer if symptoms persist. Other TCAs and SNRIs should not be used. OHGP 5th Ed Page 974

10. A 30 years male presents with total lack of interest, weakness, loss of libido, insomnia and episodes of crying for the last 6 days. What is the most appropriate management for him at this time?

A Amitriptyline

B Electroconvulsive therapy

C Escitalopram

D Referral for admission

E Watchful waiting

e. Since the symptoms have been present for only 6 days, this likely falls under acute stress reaction or adjustment disorder, rather than a major depressive episode (which requires symptoms for at least 2 weeks). Supportive care, psychoeducation, and close follow-up are recommended. If symptoms persist or worsen, further intervention may be needed.

11. A 65 years old man presents with two episodes of confusion in last one month. According to his wife he was found wandering in the streets during each episode and within two hours he become normal but could not remember anything.

What is most likely diagnosis?
A Alzheimer's disease

B Complex partial seizure

C Somnambulism disorder

D Transient global amnesia

E Transient ischemia attack

d. Transient Global Amnesia - is characterized by a sudden onset of temporary memory loss, often lasting a few hours, with preserved alertness and cognition. Patients are confused, may wander, and later have no recollection of the event. It resolves within 24 hours without residual deficits. TIAs usually have focal neurological deficits, while seizures and Alzheimer's disease involve other chronic or recurrent features.

12. A 65 years old man presents with depressed mood & no enjoyment in daily activities. He gets up early in morning & sleep is disturbed. He is already using Cimetidine, Carbamazepine and Atorvastatin. Which antidepressant is least likely to cause drug interaction?

A Citalopram

B Fluoxetine

C Paroxetine

D Fluoxamine

E Mirtazapine

e. Mirtazapine - 15–45mg nocte. Tetracyclic antidepressant. Presynaptic α2-adrenoreceptor antagonist. ↑ central noradrenergic and serotonergic neurotransmission. **Causes sedation** during initial treatment and may also cause weight ↑. Also, Mirtazapine is less likely to cause significant drug interactions as it is not primarily metabolized by the CYP450 system and has a different mechanism of action. OHGP 5th Ed Page 983

13. A 50 years old alcoholic man presents with confusion while sitting in the waiting room of your clinic, he hears voices saying that dispensers want to stab him with knife. He also has fever, palpitations, feeling of insects crawling on his body.

What is the most likely diagnosis?
A Delirium tremens

B Korsakoff psychosis

C Manic disorder

D Schizophrenia

E Wernicke encephalopathy

a. Delirium tremens - Major alcohol withdrawal symptoms usually occur 2–3d after an alcoholic has stopped drinking. Features: General - Fever, tachycardia, ↑ BP, ↑ respiratory rate, Psychiatric - Visual/tactile hallucinations, acute delirium, apprehension, Neurological - Tremor, fits, fluctuating level of consciousness. DTs have 15% mortality—always admit as an emergency. OHGP 5th Ed Page 1103

14. A 55 years old woman with memory loss is considered for Alzheimer's disease by psychologist.

Which of the following is typical of early Alzheimer's disease?
A Complete memory loss

B Impaired long term memory

C Impaired short term memory

D Non progressive memory loss

E Transient memory loss

c. Early Alzheimer’s disease (AD) primarily affects short-term memory, leading to difficulty in recalling recent events while long-term memory remains relatively preserved. Patients may repeatedly ask the same questions, misplace objects, or forget recent conversations. As the disease progresses, long-term memory and other cognitive functions become increasingly impaired.

15. A 17 years old girl has been brought by her parents due to habit of binge eating since last 3 months. Her past medical history is unremarkable. She loves eating a lot but is weight conscious. Her BMI is 23 & she has bilateral parotid enlargement, dental erosions & submandibular lymphadenopathy. She is also having elongated abrasions on the dorsum of right hand.

What is most likely diagnosis?
A Anorexia Nervosa

B Binge eating disorder

C Bulimia Nervosa

D Infectious mononucleosis

E Personality disorder

c. Bulimia nervosa: (i) repeated episodes of rapid binge eating, (ii) severe compensatory behaviors to attempt to lose weight, and (iii) an unrelenting overconcern with weight and body image. Swanson Family Medicine Review 9th Ed Pg 744

16. 18 years old patient visits because of difficulty in sleeping, poor concentration and irritability. She is easily startled. On probing she tells that 6 months back she had a car accident in which her friend died. She avoids driving & going to accident sites. What is most probable diagnosis?

A Acute stress disorder

B Adjustment reaction

C Generalized Anxiety disorder

D Major depressive disorder

E Post-traumatic Stress disorder

e. Post-traumatic Stress disorder - May occur in 25–30% of those who have experienced/witnessed traumatic events, e.g. major accident, fire, assault, military combat. It can affect people of all ages. Symptoms - Most develop symptoms immediately after the event but it is common for sufferers not to present until months/years afterwards. In ~15%, onset of symptoms is delayed. 65% experience chronic symptoms:

- Intrusive recollections Thoughts; nightmares; flashbacks
- Avoidant behaviour Of people, places, situations, or circumstances resembling/associated with the event; refusal to talk/think about the event; excessive rumination about questions about the event (e.g. Why me? How could it have been prevented?)
- Arousal ↑ anxiety/irritability, insomnia, ↓ concentration, ↑vigilance
- Numbing of emotions Inability to experience feelings; feelings of detachment; giving up previous activities; amnesia for parts of the event. OHGP 5th Ed Page 976

17. A 40 years old housewife comes with pain physiotherapy alleviates her pain. She is able to manage her routine activities and Massage around the head & occipital area.. Headache occurs most of the days of the month. What is the most likely diagnosis?

A Chronic daily headache

B Classical migraine

C Intracranial pathology

D Migraine without aura

E Tension headache

a. Chronic daily headache – Prevalence 4%. Defined as any headache that occurs >15d/mo. Common causes: tension-type headache, cervicogenic headache, medication overuse headache, migraine, errors of refraction (usually headacheis mild, frontal, in the eyes themselves, and absent on waking). Treat the cause (may be >1). OHGP 5th Ed Page 530

18. A 31 years old female comes with headache and photophobia for 3 months. She takes analgesics for most of the days of the month. Her sleep and appetite are also disturbed. What of the following she is most likely to have?

A Classical Migraine

B Drug overuse headache

C Exertional headache

D Temporal arteritis

E Tension headache

b. Medication overuse headache - Persistent headache in patients with other causes of pain who are overusing analgesics. Consider if headache develops/worsens when taking analgesic medication for ≥3mo. Implicated drugs include:

- Triptans, opioids, ergots, or combination analgesics on ≥10d/month
- Paracetamol, aspirin, or NSAID on ≥15d/month. OHGP 5th Ed Page 531

19. A 38 years old man comes with episodes of headache, pain around left eye, runny nose for 4 weeks. Pain lasts up to 40 min and occurs once daily. He noticed pain starts 1 1⁄2 hrs after sleep or when he uses alcohol. What will be your best treatment option for resolution of acute headache?

A.Diclofenac + Metoclopramide

B. Dispersible Aspirin

C. Nitrous oxide

D. Parcetamol + Metoclopramide

E. Sumatriptan

e. Cluster headaches - Acute attack 100% oxygen (>12L/min) for 10–20min; 5HT1agonists, e.g. **sumatriptan** (6mg sc or 20mg intranasal)—stops 75% in <15min. OHGP 5th Ed Page 530

20. A 45 years old patient of multiple sclerosis comes with complains of severe stabbing type of pain at left side of her jaw for 3 weeks. Pain starts when she washes her face. Pain lasts for few minutes.

What is the most appropriate first line treatment for her pain?
A. Amitryptalin

B. Carbamazepine

C. Gabapentine

D. Phenytoin

E. Prednisolone

b. Cluster headaches - Spontaneous remission may occur. The drug of choice for treatment of trigeminal neuralgia pain is **carbamazepine** (unlicensed indication). Start at low dose, e.g. 100mg od/bd and ↑ dose over weeks until symptoms are controlled. Usual dose ≈200–400mg tds. Often poorly tolerated. Oxcarbazepine is an alternative. If no response in <8wk, refer early for specialist assessment and advice on pain control. OHGP 5th Ed Page 530

21. A 23 years medical student comes with attack of left sided headache associated with nausea, vomiting and photophobia mostly on weekends. In between she is fine. She also complains of feeling of painful constricting band around her head during the days of exams and in stress. What is the single most suitable long term treatment for her?

A Amitryptalin

B Propranolol

C Sod valproate

D Verapamil

E Zolmitriptan

b. She has **migraine without aura**, characterized by unilateral, pulsatile headaches associated with nausea, vomiting, and photophobia, especially on weekends (suggesting a trigger pattern). She also experiences **tension-type headaches** during exams, which are stress-related. **Propranolol**, a beta-blocker, is a first-line prophylactic for migraine and can also help with stress-induced headaches, making it the best choice for long-term management.

22. A 35 years old female presents with unilateral throbbing headache with nausea & vomiting just before the start of her menses. What is the single most appropriate treatment from the following options?

A Amitryptaline

B Estrogens skin patches

C Progesterone only pills

D Soluble Paracetamol

E Sumatryptan

e. Menstrual migraine - Suspect if migraine occurs from 2d before to 3d after start of period on at least 2 out of 3 consecutive months (use headache diary). If predictable menstrual-related migraine that does not respond to standard acute treatment, consider frovatriptan (2.5mg bd) or zolmitriptan (2.5 mg bd/tds) on the days that migraine is expected. OHGP 5th Ed Page 529

23. A 35 years old hypertensive female presents with sudden severe headache associated vomiting and loss of consciousness. What is most appropriate first line test to confirm her diagnosis?

A CT scan brain

B Lumber puncture

C MRI of brain

D Radioisotope scan

E X-ray skull

a. Non-contrast head CT is the best initial test for: Severe head trauma, especially with loss of consciousness or altered mental status, Stroke, Any form of intracranial bleeding including **subarachnoid hemorrhage**. Master the boards 11th Edition

24. A hypertensive, chronic smoker & alcoholic patient presents with disturbed conscious level, dysphasia & incontinence but recovered within 12 hrs. Which of the following investigation is unnecessary for him?

A CT scan of Brain

B Carotid artery Doppler

C Complete clotting profile

D Complete lipid profile

E Doppler femoral veins

e. This patient likely had a Transient Ischemic Attack (TIA) given his risk factors (hypertension, smoking, alcohol use) and neurological symptoms resolving within 12 hours. Essential investigations include a CT brain (to rule out stroke), carotid Doppler (for stenosis), clotting profile (to check for coagulopathy), and lipid profile (for atherosclerosis risk assessment). Doppler femoral veins is unnecessary as there is no suspicion of deep vein thrombosis (DVT) or pulmonary embolism.

25. A 55 years old diabetic female presents with drooping of left eyelid since 2 days. Which of the following is most likely problem?

A Abducens nerve palsy

B Facial nerve palsy

C Oculomotor nerve palsy

D Trigeminal nerve palsy

E Trochlear nerve palsy

c. 3rd Oculomotor nerve - Ptosis and ophthalmoplegia—eye looks down and out, Surgical causes are also associated with pain, proptosis, and pupil dilation. OHGP 5th Ed Page 959

26. A 70 years old patient comes with tremors for the last 5 years. His face is expressionless & walks in small steps. He also complains of frequent falls. What type of tremors he most likely to have?

A Essential tremors

B Fine tremors

C Flapping tremors

D Intentional tremors

E Resting tremors

e. Resting tremor - Present at rest but abolished on voluntary movement. Most common cause—PD when tremor is rhythmic. OHGP 5th Ed Page 523

27. A 66 years old man presents with troublesome tremors in both hands for about 10 years. They occur at rest and improve during work. His neurological examination is normal. He takes salbutamol inhaler off and on.

What is the most likely diagnosis?
A Drug induced

B Essential tremors

C Metabolic cause

D Parkinson disease

E Thyrotoxicosis

D. This patient has a resting tremor that improves with movement, which is characteristic of Parkinson's disease. Essential tremors typically worsen with activity, whereas Parkinsonian tremors occur at rest and improve with voluntary movement. The absence of other neurological signs does not exclude early Parkinson's. Salbutamol is not a common cause of drug-induced tremors, and metabolic or thyroid causes usually present with additional systemic symptoms.

28. An epileptic mother wants to breast feed her baby. Which drug is safest choice for her?

A Carbamazepine

B Gabapentin

C Lamotrigine

D Phenobarbitone

E Phenytoin

a. The safest choice for an epileptic mother who wants to breastfeed her baby among the options provided is **Carbamazepine**. Carbamazepine is considered safe during lactation due to its long-term clinical experience and extensive data supporting its safety profile. It has a low degree of penetration into breast milk and is generally well-tolerated by infants. https://pubmed.ncbi.nlm.nih.gov/23985170/

29. A 20 years female presents with severe breast pain lasting 10 days with every menstrual cycle & during these days she is unable to perform daily activities. What will be the drug of choice for her problem?

A C.O.C pill

B Danazol

C Mefenamic acid

D Progesterone only pills

E Spironolactone

b. In most women, fibrocystic breast changes - Treatment: supportive measures, oral contraceptives with low estrogenic activity, and potent progestin, medroxyprogesterone acetate. In **severe cases** Tamoxifen. GnRH analogues and **Danazol** have been considered but have considerable side effects. Swanson Family medicinie Review 9th Ed 360

30. A 16 years old male presents with enlargement of right breast since last 4 months. His right breast is enlarged, nodular and mobile.

What is the most appropriate step in management?
A Biopsy

B Mammography

C Reassurance

D Serum FSH

E Serum Testosterone

c. Fibrocystic breast changes do not have to be treated. Swanson Family medicinie Review 9th Ed 358

31. A 33 years old female presents with bloody discharge from left nipple from last 2 months. She also noted a small lump just beneath the areola on that side.

What would be the most probable diagnosis?
A Carcinoma of breast

B Fibroadenoma

C Fibrocystic disease

D Intraductal Papilloma

E Mammary duct ectasia

a. This patient likely has an intraductal papilloma, which is a small, soft tumor that is found just below the areola. If a patient has a bloody nipple discharge associated with a small, soft mass, there is a 95% probability that this is an intraductal papilloma. If physical examination reveals no mass, Paget disease of the nipple, an adenoma of the nipple, or a breast carcinoma with ductal invasion must be considered in the differential diagnosis. The treatment of choice is surgical removal. This is often facilitated by mammography or a ductogram. Swanson Family medicinie Review 9th Ed 358

32. A 20 years old female presents with painful breast lump about two cm in size for the last 5 months. The lump is firm, round, non tender and mobile. She has history of similar lumps in the past which resolved without surgery. What would be the most probable diagnosis?

A Carcinoma of breast

B Fibroadenoma

C Fibrocystic disease

D Intraductal Papilloma

E Mammary duct ectasia

b. This patient possibly has a fibroadenoma or “breast mouse.” Fibroadenomas are the most common type of solid benign breast tumors. They are most prevalent in women younger than age 25 years. They are usually painless, well circumscribed, completely round, and freely mobile. The classic description with respect to consistency is “rubbery.” Swanson Family medicinie Review 9th Ed 358

33. A 45 years old female presents with asymmetrical nodularity in her breasts. Her sister died of breast cancer at the age of 46 years. What would be the most probable advice for her?

A Breast biopsy

B Excision biopsy

C Mammography

D Needle localization

E Ultrasound breast

c. Given the patient's age and family history of breast cancer (her sister died of breast cancer at age 46), the most appropriate initial step for evaluating asymmetrical nodularity in her breasts would be **C Mammography**. Mammography is a standard screening tool for breast abnormalities, especially in women over 40 years old. It can help identify any suspicious lesions or abnormalities that may require further investigation.

Here's why mammography is a good starting point:

- **Family History**: The patient has a first-degree relative (sister) who died of breast cancer, which increases her risk. Mammography is recommended for women with a family history, often starting at an earlier age than the general population18.
- **Age**: At 45 years old, mammography is appropriate for initial screening.
- **Asymmetrical Nodularity**: Mammography can help assess the nature of the nodularity and guide further diagnostic steps if needed. https://www.cancerresearchuk.org/about-cancer/breast-cancer/risks-causes/family-history-and-inherited-genes

34. A 42 years old female complains of nodularity of her breast before menstruation since last 12 years. She has a fear of having breast cancer as one of her second cousin had breast cancer. Her breast examination is unremarkable.

E RESOURCE

What is the most appropriate step in management?
A Bromocriptine

B C.O.C pill

C Chymotrypsin

D Reassurance

E Spironolactone

d. This patient most likely has Fibrocystic Disease of Breast, and histoiry of breat cancer in 2nd degree fsamily relatives is not a risk factor, therefore reassurance is most appropriate option in this scenario.

35. A 20 years old lactating mother presents with a mass in breast which is tender, warm & painful for the last 15 days. What will be the most probable diagnosis?

A Acute mastitis

B Breast abscess

C Galactocoele

D Hemorrhagic breast cyst

E Mammary duct ectasia

b. Breast abscess - Usually occurs in a lactating breast following mastitis; occasionally in a non-lactating breast in association with indrawn nipple, mammary duct ectasia, or local skin infection. Presents with gradual onset of pain in 1 breast segment with hot, tender swelling of the affected area. Refer for surgical assessment. May be treated with repeated aspiration under ultrasound guidance or surgical incision and drainage. OHGP 5th Ed Page 669

36. A 22 years old female presents with a lump of 2 cm in her left breast for last 3 months. She is in last trimester of pregnancy. The lump is firm, oval and partially mobile. What is the single most appropriate advice for her lump?

A Bromocriptine

B Chymotrypsin

C Cold compresses

D Reassurance

E Referral

e. Galactocoele - Milk-containing cyst which arises during pregnancy. Refer any new lump arising in pregnancy to a breast surgeon. Repeated aspiration may be needed. Resolves spontaneously. OHGP 5th Ed Page 669

37. A 5 years old child is brought with a burn on her right hand 4 hours ago. There is blister formation on the site of burn. At this time what would be the most appropriate course of action?

A Wound debridement

B Blister aspiration

C Cold water immersion

D Silver sulphadiazine

E Sterile dressing

e. Do not burst blisters. Cover the burn with a non-adherent dressing. Apply a non-fibrous secondary absorbent dressing such as a dressing pad, and secure well with a lightweight conforming bandage or a tubular gauze bandage. OHGP 5th Ed Page 1096

38. A 4 years old baby is brought by his mother after having banged his thumb in a door. He is crying & irritable. There is purplish discoloration under the nail of thumb.

What is the most appropriate step in management?

A Apply hot paper clip

B Reassurance

C Remove nail

D Sterile dressing

E Wedge resection of nail

a. Subungual haematoma - A blow to the finger can cause bleeding under the nail—very painful due to pressure build up. Relieve by trephining a hole through the nail using a 19-gauge (cream-coloured) needle (no force required, just twist the needle as it rests vertically on the nail) or a heated point (e.g. of a **paper clip** or cautery instrument). Of benefit up to 2d after injury. OHGP 5th Ed Page 462

39. A 25 years female presents with a sore left big toe for the past 4 days. The lateral aspect of toe is erythematous and pus is oozing from the corner between the nail and skin. What is the most appropriate step in management?

A Oral Cloxacillin

B Reassurance

C Remove the nail

D Wedge resection of nail

E Wound debridement

a. Ingrowing toe nail - Most common in the big toe. Ill-fitting shoes and poor nail cutting predispose to the nail growing into the toe skin ← pain. The inflamed tissue is prone to infection. Advise about cutting nails (cut straight with edges beyond the flesh). Refer to podiatry. Treat infection with antibiotics (e.g. flucloxacillin 500mg qds). If recurrent infection, consider referral for surgery (e.g. wedge resection of the nail). OHGP 5th Ed Page 473

40. A 28 years old male presents with painful rectal bleeding & burning for the last 1 week. Pain in rectal area is maximum at the time of defecation and persists following defecation for some time? What is the most likely diagnosis?

A Acute anal fissure

B Adenocarcinoma of rectum

C External hemorrhoids

D Fistula in Ano

E Internal hemorrhoids

a. Anal fissure - Anal mucosa is torn—usually on the posterior aspect of the analcanal. May occur at any age. Presents with pain on defecation ±constipation ± fresh rectal bleeding ('blood on toilet paper'). The fissure is often visible as is a 'sentinel pile' (bunched up mucosa at the base of the tear). Rectal examination is very tender due to muscle spasm. OHGP 5th Ed Page 374

41. A 45 years old male presents with a 4 day history of rectal pain. The pain is dull, constant and made worse by defection. There are 3 cm x 2 cm purple shiny mass present at 3 O' clock position in the anal area. What is the single most appropriate step in management?

A Anal dilatation

B Incision and evacuation

C Local Anti-inflammatory

D Sclerotherapy injection

E Sitz bath

b. Perianal haematoma (thrombosed external pile) - Due to a ruptured superficial perianal vein causing a subcutaneous haematoma. Presents with sudden onset of severe perianal pain. A tender, 2–4mm 'dark blueberry' under the skin adjacent to the anus is visible. Give analgesia. Settles spontaneously over ~1wk. If <1d old can be evacuated via a small incision under LA. OHGP 5th Ed Page 374

42. A 25 years old patient is brought in emergency with headache, dizziness & seizures. His skin is pink and mucosae are cherry red. His pulse is 130 BPM, RR is 30/min. What is the most probable poisoning agent in this case?

A Barbiturate

B Cocaine

C Cyanide

D Organophosphate

E Tricyclic antidepressant

c. Cyanide poisoning presents with headache, dizziness, seizures, tachycardia (130 BPM), tachypnea (30/min), and characteristic "cherry-red" skin and mucosae due to impaired oxygen utilization at the cellular level. Also there is bitter almond odor. Cyanide inhibits cytochrome c oxidase, preventing cellular respiration. Immediate management includes 100% oxygen, hydroxocobalamin, or sodium thiosulfate as antidotes.

43. A 17 years old girl is brought to your clinic after ingestion of 20 sleeping pills. She has drowsiness, slurred speech, nystagmus and ataxia. Her BP is 100/60 mm Hg, pulse is 100 BPM, RR is 12/min. Her pupils are normal. What is the most appropriate antidote for her?

A Atropine

B Charcoal

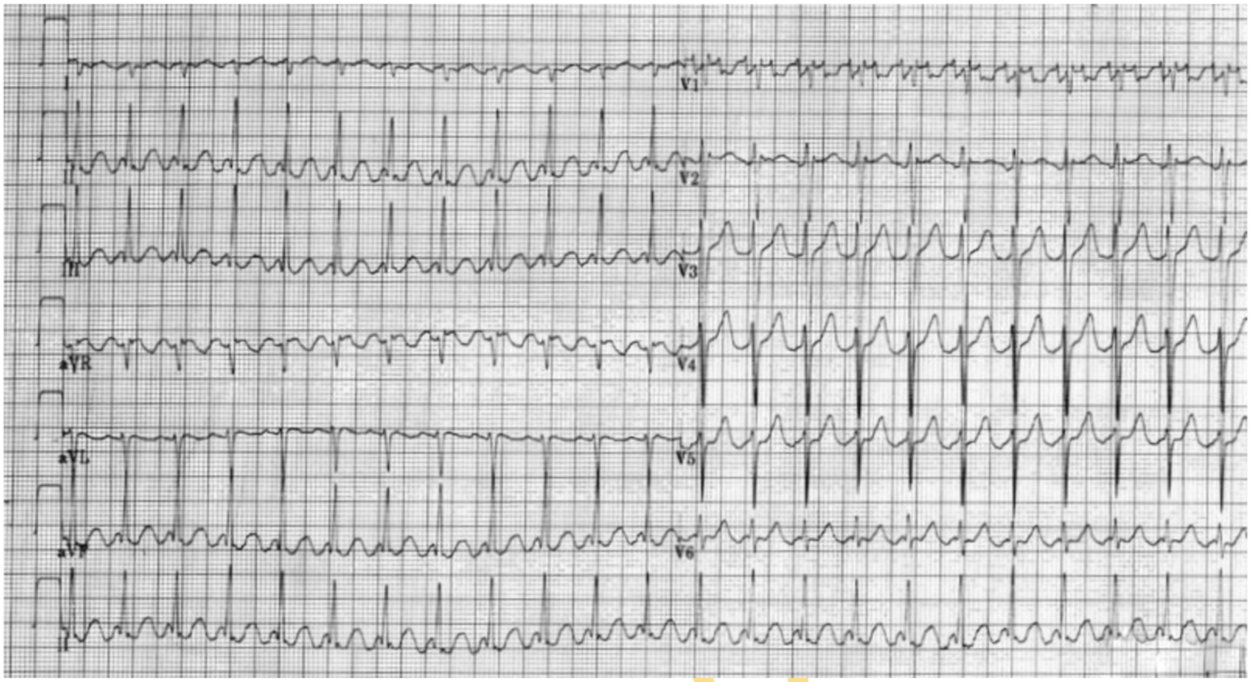
C Doxapram

D Flumazenil

E Naloxone

d. This patient has benzodiazepine overdose, indicated by drowsiness, slurred speech, nystagmus, and ataxia, with normal pupils and mild respiratory depression. For benzodiazepine sedation, flumazenil (Romazicon) is the first benzodiazepine antagonist approved by the United States Food and Drug Administration. Benzodiazepines are considered the medical management for alcohol.

44. A 39 years old man has been brought to your clinic with severe palpitations. His pulse is 160/mm & BP is 100/60 mmHg. His ECG shows: What will be yours 1" step in management?



A Adenosine

B Cardioversion

C Carotid massage

D Propranolol

E Verapamil

c. This patient has supraventricular tachycardia (SVT), as indicated by a regular narrow-complex tachycardia at 160 BPM. In a hemodynamically stable patient (BP 100/60 mmHg), the initial step is vagal maneuvers (carotid massage or Valsalva maneuver) to increase vagal tone and terminate the arrhythmia.

- If vagal maneuvers fail, Adenosine is the next step.
- Cardioversion is used if the patient becomes unstable (e.g., hypotension, altered consciousness). OHGP 5th Ed Page 239

45. A 21 years old man complains of severe itching. redness of skin, vomiting, shortness of breath, wheezing and weakness few minutes after eating a fruit cake. His pulse is feeble and BP is 80/50 mm Hg. What is the single most appropriate drug for this patient?

A Adrenaline

B Atropine

C Cetirizine

D Hydrocortisone

E Ringer's lactate

a. Anaphylaxis Shock: Recognize Anaphylaxis – Look for airway swelling, breathing difficulty, circulatory collapse, confusion, or skin changes.

Call for Help & Lie Flat – Ensure emergency response is activated.
Administer IM Adrenaline (1:1000) ASAP:

- Adults & >12y: 0.5mL (500 mcg)
- Children 6-12y: 0.3mL (300 mcg)
- Children <6y: 0.15mL (150 mcg)
- Repeat every 5 minutes if no improvement.

Monitor Vital Signs – BP, ECG, Pulse Oximetry.
Consider Adjunctive Treatment:

- IV Fluids: 500mL–1L in adults, 20mL/kg in children.
- Chlorphenamine (Antihistamine): IM/IV (10mg for adults).
- Hydrocortisone: IM/IV (200mg for adults).

Continue Monitoring & Repeat Adrenaline if Needed. OHGP 5th Ed Page 1054

46. A 20 years old patient presents with high fever, headache and vomiting since 1 day. He is drowsy and his neck is stiff. What drug will you give him before sending to the hospital?

A IV Ampicillin

B IV Benzyl penicillin

C IV Ceftriaxone

D IV Gentamycin

b. Antibiotics for suspected meningococcal sepsis:

- Give benzylpenicillin. Dose: adult or child ≥10y—1.2g; child 1–9y—600mg; infant <1y—300mg
- Withhold penicillin ONLY if clear history of anaphylaxis in response to a previous dose. Rash following penicillin is not a contraindication
- Cefotaxime is an alternative: adult or child >12y—1g; child <12y—50mg/kg. OHGP 5th Ed Page 1056

47. You are visiting a 30 years old asthmatic patient at home. He is unable to talk and is restless. His breath sounds are diminished and his PEF is 40%, RR is 40/minutes, pulse is 120 BPM. You called an ambulance immediately. What drug will you give him in ambulance before shifting to the hospital?

A Intravenous Hydrocortisone

B IV Aminophyllin infusion

C Montelukast stat dose

D Salbutamol nebulizer via 02

E Subcutaneous adrenaline

d. Asthma - If admitting the patient to hospital

- Stay with the patient until the ambulance arrives
- Send written assessment including NEWS2
- Give β2 bronchodilator via an oxygen-driven nebulizer in the ambulance

48. 3 yrs old child presents with fever and runny nose for 3 days. There is inspiratory stridor and barking cough typically at night exacerbated by crying.

What is the most likely diagnosis?
A Acute bronchitis

B Bronchiolitis

C Croup

D Pneumonia

E Tonsillitis

c. Croup - Common viral infection occurring in epidemics in autumn and spring. Starts with mild fever and runny nose. In younger children (<4y), results in a barking cough and inspiratory stridor. The cough typically starts at night and is exacerbated by crying. Some children have recurrent attacks associated with viral URTI. OHGP 5th Ed Page 915

49. A 9 years old male child presents with sneezing. blockage, itchy nose, eyes, palate, and throat with watery nasal discharge for 2 years. There is crease on the bridge of nose nasal discharge and swollen inferior turbinates. What is the most likely diagnosis?

A Allergic rhinitis

B Atrophic rhinitis

C CSF rhinorrhea

D Hay fever

E Vasomotor rhinitis

a. Allergic rhinitis - Inflammation of the nasal mucosa. Affects >1 in 5 people. May be allergic (most children; 1 in 3 adults) or non-allergic (e.g. vasomotor—triggered by physical/chemical agents such as cold air, tobacco, or perfumes; drug induced). If allergic cause is suspected, ask about allergens: pollen, animals, fungi/moulds, occupational allergens (e.g. flour, latex). wollen inferior turbinates; ↓ nasal airway; pale or mauve mucosa; nasal discharge; 'allergic crease' on bridge of nose from persistent rubbing (young sufferers with allergic rhinitis). OHGP 5th Ed Page 920

50. A 23 years old male presents with red, sore and sticky eyes for 3 days with watery discharge. Papillae are present under the upper eye lids and preauricular lymph nodes are enlarged. What is most likely diagnosis?

A Blepharitis

B C

C Herpes zoster

D Orbital cellulitis

E Scleritis

b. Allergic Conjunctivitis - Inflammation of the conjunctiva is the most common eye problem seen in general practice. 1 in 8 children have an episode of acute infective conjunctivitis every year. Presents with unilateral/bilateral red eye with surface irritation; eye discharge (clear, mucoid, or muco-purulent); sticking of the eyelids, especially on waking; no change in visual acuity. Examination may reveal enlarged papillae under the upper eyelid and/or **pre-auricular lymph node** enlargement. OHGP 5th Ed Page 944

51. 17 years old boy presents with red eye for 3 months. Eye lids have red margins with scales on the eye lashes.

What is most likely diagnosis?
A Allergic Conjunctivitis

B Bacterial Conjunctivitis

C Blepharitis

D Preseptal cellulitis

E Viral Conjunctivitis

c. Blepharitis - Chronic, low-grade inflammation of meibomian glands and lid margins. Presents with long history of irritable, burning, dry, red eyes. Eyelids have red margins ± scales on the eyelashes. On elevation of the upper lid, look for inflamed meibomian glands. Associated with dry eyes, internal stye and ingrowing eyelashes. OHGP 5th Ed Page 942

52. A 45 years old female presents with blistering rash followed by pain and tingling around eye for 3 days. What is the most appropriate step in management?

A Chloramphenicol eye drops

B Naphazolin eye drops

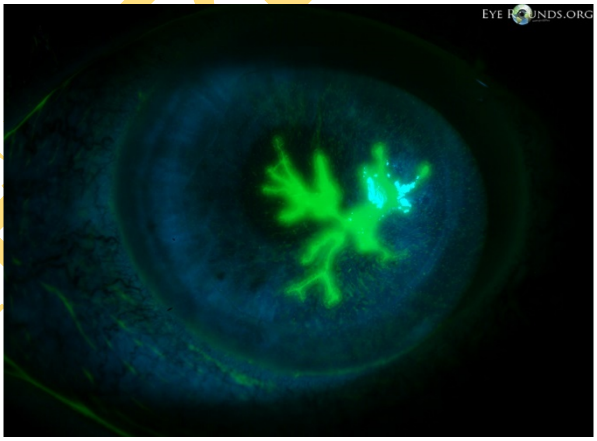
C Prednosilone eye drops

D Reassurance

E Refer immediately

e. Ophthalmic shingles - Zoster in the ophthalmic branch of the oculomotor (3rd) nerve. Pain, tingling, or numbness around the eye precedes a blistering rash and inflammation. In 50% the eye is affected with conjunctivitis, scleritis, episcleritis, keratitis, iritis, visual loss, and/or oculomotor nerve palsy. Nose tip involvement (Hutchinson's sign) makes eye involvement likely (nerve supply is the same as the globe). Prescribe oral aciclovir (800mg 5×/d) and **refer immediately.** The cornea may become anaesthetic/scarred and require grafting. OHGP 5th Ed Page 947

53. A 35 years old female presents with pain, photophobia, watering eye with blurred vision. Fluorescene staining of conea shows the following picture.



What is likely diagnosis?

A Arcus senalis

B Bacterial keratitis

C Corneal abrasion

D Corneal foreign body

E Dendritic ulcer

e. Herpes simplex infection and dendritic ulcer - HSV keratitis is common and can be recurrent in the same eye with the virus lying dormant within the trigeminal nerve between attacks. Presents with acute keratitis or keratoconjunctivitis. Occasionally may present as an irritable eye with little discomfort. Examination and fluorescein staining reveals a characteristic corneal ulcer with a delicate branching pattern (dendritic ulcer). Refer for urgent (same-day) ophthalmology opinion. Treatment is with 3% aciclovir ointment 5×/d continued for 3d after healing.

There is a danger of massive amoebic ulceration and blindness if steroid eye drops are administered to patients with dendritic ulcer. OHGP 5th Ed Page 946

54. 24 years old male presents with skin rash over body for 4 days, followed several days after the appearance of a large single lesion. Lesions are oval pink with delicate scales. What is likely diagnosis?

A Keratosis pilaris

B Numular eczema

C Pitriasis alba

D Pityriasis rosea

E Pityriasis versicolor

d. Pityriasis rosea - Acute self-limiting disorder most commonly affecting teenagers and young adults. Cause: unknown, possibly viral. Generalized eruption is preceded by the **herald patch**—a single large, oval lesion 2–5cm diameter Several days later the rash appears consisting of many smaller lesions mainly on trunk (following the ribs giving a 'Christmas tree' pattern) but also upper arms and thighs. Lesions are oval, pink, and have a delicate 'collarette' of scale. May be asymptomatic or cause mild/moderate itch. Treatment does not speed clearance. Topical steroid may relieve itch. Fades spontaneously in 4–8wk. OHGP 5th Ed Page 596

55. A 13 years old male presents with sore throat for 10 days. There is enlarged spleen, cervical lymph nodes, palatal petechiae and rash over the body. He used Amoxicillin 2 days ago. What is the single most appropriate treatment?

A Acyclovir

B Benzathine Penicillin

C Erythromycin

D Paracetamol

E Prednisolone

d. Glandular fever (infectious mononucleosis: Management – Advise rest, fluids, and regular **paracetamol**, avoid alcohol. Try salt-water gargles or aspirin gargles (only if >16y). Consider a short course of prednisolone for severe symptoms. Treat 2° infection with antibiotics. Advise to avoid contact sports/heavy lifting for >1mo due to risk of splenic rupture. Symptoms may last several months). Do not prescribe **amoxicillin** as it may cause a rash. OHGP 5th Ed Page 913

56. A 3 years old child presents with fever and runny nose for 3 days. There is inspiratory stridor and barking cough typically at night exacerbated by crying. He is on prednisolone and oxygen. What is the single most next step?

A Acyclovir

B Ceftriaxone

C IV adrenaline

D Moist air

E Salbutamol

d. Croup: Management - **Steam** helps. Steroids can be helpful—give oral dexamethasone 0.15mg/kg, or prednisolone 1–2mg/kg. Admit as a paediatric emergency if there is intercostal recession, cyanosis, or the child’s carers are unable to cope. OHGP 5th Ed Page 915

57. A 34 years old male presents with pain in left ear and facial nerve palsy. There are vesicles around ear, in external ear canal and in tonsillar fossa. What is the single most specific treatment?

A Acyclovir

B Amoxicillin

C Hot fermentation

D Amitriptyline

E Prednisolone

a. Ramsay Hunt syndrome (herpes zoster oticus) - Severe pain in the ear precedes facial nerve palsy. Zoster vesicles appear around the ear, in the external ear canal, on the soft palate, and in the tonsillar fossa. Often accompanied by deafness ± vertigo which are slow to resolve and may result in permanent deficit. Pain usually abates after 48h but post-herpetic neuralgia can be a problem. If detected <24h after the rash appears, treatment with **antivirals** (e.g. aciclovir 800mg 5×/d for 1wk) may be effective. OHGP 5th Ed Page 512

58. A 26 years old female presents with sudden onset of vertigo, prostration, nausea and vomiting. There is history of viral upper respiratory tract infection few days ago. There is no associated hearing loss and tympanic membranes are normal. What is the most likely diagnosis?

A Acute labrynthitis

B Benign positional vertigo

C Menniere's disease

D Ramsay Hunt Syndrome

E Vestibular neuronitis

e. Vestibular neuritis is characterized by vertigo lasting for days **without hearing loss**, ear pain, or other symptoms and is often associated with a preceding upper respiratory tract infection. Management includes rest, reassurance, and symptomatic treatment with antiemetics, antihistamines, and benzodiazepines. Swanson Family medicinie Review 9th Ed 279

59. A 23 years old male presents with red, sore and sticky eyes for 3 days with watery discharge.. Papillae are present under the upper eye lids and preauricular lymphnodes are enlarged. What is most appropriate first line treatment?

A Acyclovir

B Artificial tears

C Gentamycin

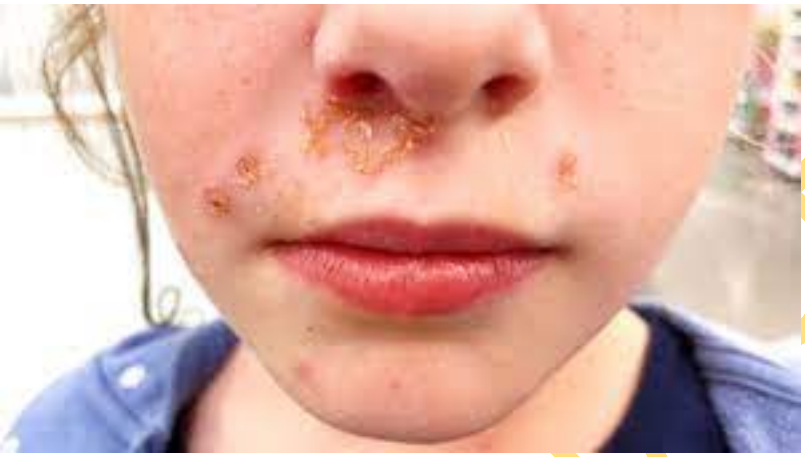
D Nephazolin

E Prednisolone

b. Management of acute, infective conjunctivitis: Usually self-limiting condition; 65% settle in 2–5d without treatment; advise patients to bathe the affected eye(s) with boiled, cooled water

morning and night, avoid contact lens use, and use simple hygiene measures (e.g. hand washing and not using shared towels)
If symptoms are not improving in 3–5d, review the diagnosis and consider treatment with topical chloramphenicol qds for 5d. OHGP 5th Ed Page 944

60. A 7 years old girl presents with rash on face for 3 days as shown in picture. What is the most appropriate treatment?



A Oral Ampicillin

B Topical Fusidic acid

C Topical Gentamycin

D Topical Acyclovir

E 1% Hydrocortisone cream

b. Impetigo - Superficial skin infection due to Staph. aureus. Very common in childhood. A thin-walled blister ruptures easily to leave a yellow crusted lesion. May occur anywhere but most common on the face. Differential diagnosis: HSV, fungal infection (e.g. ringworm). Lesions spread rapidly and are contagious. Avoid spreading to other children—no sharing of towels, face flannels, etc.; some schools/nurseries/childminders prohibit attendance until lesions are cleared. Reassure that it is non-scarring:

- Localized Treat with **topical antibiotics (e.g. fusidic acid cream)**
- Widespread Treat with oral flucloxacillin or clarithromycin.

MOCK 4

1. A 58 years old postmenopausal woman presents with vaginal bleeding. There is no history of lower abdominal pain, fever, vaginal discharge or dyspareunea.
What should be the single most appropriate step in the management?
A Endometrial sampling

B Hormone Replacement Therapy

C Pelvic laparoscopy

D Tranexamic acid + Mefenamic acid

E Transvaginal Ultrasound

e. Refer to gynaecology to be seen in <2wk if aged ≥55y and PMB; consider referral if <55y. Assessment involves transvaginal USS to assess endometrial thickness ± hysteroscopy/endometrial sampling. OHGP 5th Ed Page 696

2. A 52 years old woman presents with mild vaginal discharge and postcoital bleeding. Her pap smear shows moderate dyskaryosis.
What should be the next step in her management?
A Endometrial sampling

B Pelvic laparoscopy

C Refer for Colposcopy

D Repeat smear after 6 months

E Repeat smear after 3 months

c. Moderate dyskaryosis (CIN-II) are referred for colposcopy. Dyskaryotic glandular cells Refer for colposcopy. OHGP 5th Ed Page 704

3. A 62 years old woman presents with vaginal soreness, dyspareunea and spotting. Her vagina. looks pale and dry. The reports of pap smear and endometrial sampling are negative. Ultrasound pelvic is normal.
What should be the next step in her management?
A Cryotherapy

B Topical Clindamycin

C Topical Estrogen

D Topical Steroids

E Tranexamic acid

c. Vaginal soreness ± dyspareunia. Common cause of postmenopausal bleeding (PMB). Vagina looks pale and dry. Treat with topical oestrogen (e.g. each night for 2wk, then 2×/wk for ≥3mo) and/or consider systemic HRT. OHGP 5th Ed Page 706

4. A 36 years old female presents with lower pain, vaginal abdominal discharge, dysmenorrhea and menorrhagia. Her lower abdomen is tender. Pelvic examination shows bulky, tender and mobile uterus. She is on Metronidazole and Doxycylcine.
Which other drug would you add according to WHO guidelines?
A Azithromycin

B Ceftriaxone

C Ciprofloxacin

D Clindamycin

E Gentamycin

b. Adenomyosis - May be asymptomatic, or present with dysmenorrhoea (pain often peaks near the end of menstruation), dyspareunia, and menorrhagia. On examination, the uterus may be symmetrically enlarged and tender. Refer for pelvic USS (transvaginal or abdominal) if suspected. OHGP. In this case PID is also suspected and according to WHO, treatment of choice in PID is ceftriaxone + Doxycycline and metronidazole. OHGP 5th Ed Page 693

5. A 35 years old female presents with secondary amenorrhea for 7 months. There is no history of weight gain or abnormal hair growth. Her labs. show normal Serum Prolactin and LH but her FSH is raised. Her pregnancy test is negative. What is the most likely diagnosis?

A Asherman's syndrome

B Pituitary adenoma

C Polycystic ovarian syndrome

D Primary ovarian failure

E Sheehan's syndrome

d. Premature menopause (premature ovarian insufficiency) - Menopause in a females aged <40y. In most cases no cause is found. May be surgical (can follow hysterectomy even if ovaries are conserved), follow radio- or chemotherapy, or be associated with infection (e.g. mumps, TB) or other endocrine disease. Associated with ↑ all-cause mortality and ↑ risk of osteoporosis and CVD. HRTis recommended until the average age of menopause, i.e. 51y. Refer for specialist advice if HRT is contraindicated. OHGP 5th Ed Page 687

6. A 45 years old sexually active female presents with flushes and palpitations. She also has oligomenorrhea since 2 years. Her FSH, LH, and TSH are normal. Hb is 13 mg/dl. Pelvic ultrasound is normal.

What should be the most appropriate management option?

A Amitriptyline

B Combined Oral Contraceptive pill

C Hormone Replacement Therapy

D Progesterone only pill

E Propranolol

c. HRT - First-line—effective for 80–90% of females in vasomotor symptoms of menopause. OHGP 5th Ed Page 686.

7. A 22 years old female presents with missed periods. She has been having abdominal cramps, heavy vaginal bleeding with clots since last night. Her Cervix is closed and USG reveals empty uterus and normal tubes. What is the most likely diagnosis?

A Complete abortion

B Ectopic pregnancy

C Inevitable abortion

D Missed abortion

E Threatened abortion

a. Complete miscarriage - History of bleeding. OS closed and No products of conception in the uterus. Provide psychological support. OHGP 5th Ed Page 767

8. A 26 years old female presents with missed periods and persistent vomiting. Her uterus is large for dates and USG reveals grape like material inside uterine cavity.
What should be the most appropriate initial treatment?

A Arrange for laparoscopy

B Dilatation and evacuation

C Induction of labor

D Start Methotrexate

E Watchful waiting

b. Hydatidiform mole - presents with Bleeding in early pregnancy ± exaggerated symptoms of pregnancy, Uterus is usually large for dates, and no fetal heart can be heard, USS has a typical appearance; blood—increased serum β-hCG, Rarely symptoms of metastatic spread—haemoptysis, pleurisy. OHGP 5th Ed Page 768
Treatment includes evacuation and curettage, or hysterectomy, depending on the age of the patient and her desire to preserve fertility. βHCG should be tested weekly until the titer is within normal limits for three weeks and then should be drawn monthly for six to 12 months.5 The patient who is Rh-negative should receive Rh-immunoglobulin. Effective contraception must be used during the entire follow-up period of at least one year.1 The patient who has had a hydatidiform mole should be reassured that only 1 percent of subsequent conceptions result in another molar pregancy. https://www.aafp.org/pubs/afp/issues/1999/0201/p649.html

9. A 25 years old married female presents with offensive, greyish vaginal discharge. Smear shows epithelial cells with attached bacteria. What is the most appropriate first line treatment?

A Ceftriaxone

B Ciprofloxacin

C Doxycycline

D Fluconazole

E Metronidazole

e. Bacterial vaginosis (BV) - Vaginal flora is changed from Lactobacillus species to anaerobes. Not sexually transmitted. Affects 10–40% of premenopausal women—about half are asymptomatic. Grey/white, thin, fishy-smelling, offensive discharge with no vulval soreness. On examination, the cervix looks normal; pH of secretions is >4.5. HVS for M,C&S may confirm diagnosis but treat without swab. Associated with:

- ↑ risk of preterm delivery (and ↓ risk if treated)
- Development of PID and endometritis following abortion or birth
- Infection after hysterectomy

Without treatment, 50% remit spontaneously, Metronidazole 400mg bd for 5–7d or 2g single dose or clindamycin 2% cream 5g nocte PV for 1wk. OHGP 5th Ed Page 713

10. A 30 years old female presents with severe itching & burning of vulva for a few days associated with painful micturation. Her vulva is edematous with tender shallow round ulcers. What is the most appropriate treatment option?

A Acyclovir

B Benzathine Penicillin

C Clotrimazole

D Cryotherapy

E Doxycylcine

a. Genital herpes - May be asymptomatic. If symptomatic, history and examination are diagnostic in 90% cases. Presents with multiple painful genital ulcers on a red background ± inguinal lymphadenopathy <1wk after sexual contact. Lesions crust over then heal. Untreated lasts 3–4wk. Complications: urinary retention, aseptic meningitis. Treat with aciclovir if presents ≤5d after symptoms start and while new lesions are still forming (↓ duration, symptoms, and complications). OHGP 5th Ed Page 724

11. A 38 years old female presents with painful ulcers on labia & mouth, multiple joint pains and decreased vision with floaters in eyes. She has no backache.
What is the most likely diagnosis?
A Behcet disease

B Gonococcal infection

C Herpes Simplex

D Rieter's syndrome

E Syphilis

a. Behcet disease - Multi-organ disease of unknown cause (although thought to be infective). Clinical picture (only some features): arthritis; ocular symptoms and signs—pain, ↓ vision, floaters, iritis; scarring painful ulceration of mouth and/or scrotum; colitis; meningoencephalitis. Refer to GUM clinic, ophthalmologist or general physician depending on symptom cluster. Treatment is usually with steroids ± azathioprine or ciclosporin. Topical steroids may be useful for ulcers. OHGP 5th Ed Page 493

12. A 28 years old female presents with severe lower abdominal pain one day after insertion of IUCD. On examination thread of IUCD is missing and her abdomen is tense.
What should be the most appropriate diagnosis?
A Cervical trauma

B Endometritis

C Expulsion of IUCD

D Uterine perforation

E Uterine rupture

b. Endometritis - Acute infection of the endometrium, usually after surgery (including IUCD insertion) or childbirth. Presents with fever, low abdominal pain, uterine tenderness, and/or purulent discharge (may be bloodstained). Take high vaginal/endocervical swabs for M,C&S(including chlamydia). Treat with antibiotics, e.g. doxycycline 100mg bd for 7d + metronidazole 400mg bd for 1wk. OHGP 5th Ed Page 697

13. A 22 years old unmarried female has Epilepsy for two years. She also has history of repeated episodes of pelvic inflammatory disease. She is taking Valporic acid and phenytoin
What should be most appropriate dose of estrogen in COC for this woman?
A 30μg

B 35μg

C 40μg

D 50μg

E 70μg

d. Efficacy of oral hormonal contraception and contraceptive implants can be ↓ by antiepileptic medications that ↑ the activity of hepatic cytochrome enzyme P450. For women taking enzyme-inducing antiepileptic medication, intrauterine contraception (IUS or Cu-IUD) or long-acting injectable progestogens are contraceptives of choice. If a woman wishes to use combined oral contraceptives, efficacy can be ↑ by:

- Increasing oestrogen dose to 50–70 micrograms/d
- Tri-cycling—taking 3 packets back to back without a pill-free interval, and
- ↓ the pill-free interval to 4d. OHGP 5th Ed Page 728

14. A 25 years old pregnant woman comes for antenatal screening at 10 weeks of gestation. Her previous child had skeletal abnormalities. What should be the best screening plan for her?
A Amniocentesis at 18 weeks

B Chorionic villous sampling at 10 wk

C Serum B HCG at 12 weeks

D Ultrasound at 18 weeks

E a fetoprotein at 12 weeks

d. High-resolution 'anomaly' scan (including fetal echocardiography) Offered at 18wk–20wk 6d to detect fetal structural abnormalities, Lethal skeletal dysplasia has 60 % chance of detection at USG. OHGP 5th Ed Page 783

15. A 28 years old primigravida presents with unusual weight gain and feelings of heart sinking. Her lab shows Hb 12 mg/dl, RBS 105 mg/dl, TSH is 23 IU (0.4 to 4.0), T4 is decreased. What should be the most appropriate management plan?
A Iodized salt

B Propranolol

C Propyl thiouracil

D Start thyroxin

E Watchful waiting

d. Hypothyroidism - If untreated associated with infertility, ↑ rate of miscarriage, stillbirth, and fetal abnormality. Levothyroxine dose usually needs to ↑ in pregnancy—the fetus is not affected by maternal thyroxine. Check TFTs in each trimester. OHGP 5th Ed Page 802

16. A 24 years old G2P1 presents at 30 weeks of gestation for antenatal care. She is asymptomatic and her B.P is 160/100 mm Hg on three different occasions. Urine is negative for proteins and there is no edema.
According to NICE guidelines what should be the first line management plan?
A Captopril

B Hydralazine

C Labetolol

D Methyldopa

E Nifedipine

c. Pregnancy-induced hypertension (PIH) - ↑ BP appearing >20wk into pregnancy and resolving <3mo after delivery without proteinuria. Labetolol is 1st line. OHGP 5th Ed Page 804

17. A 22 years old G3P2 presents to you at 18 weeks of gestation. His son developed chicken pox 2 days back. Woman is negative for chicken pox IgG.
What is the most appropriate management plan for her?

A Acyclovir

B Acyclovir & immunoglobulin

C Immunoglobulin

D No intervention

E Termination of pregnancy

c. Arrange for VZ-Ig to be given to mother and/or baby. This can be lifesaving and significantly ↓ disease severity if given ≤10d after exposure. OHGP 5th Ed Page 794

18. A 26 years old woman presents 5 days after delivery with heavy vaginal bleeding and fever since last night. Her uterus is tender & cervix is dilated.
What is the most appropriate diagnosis?
A Cervical tear

B Clotting disorders

C Puerperal sepsis

D Uterine atony

E Uterine rupture

c. Secondary PPH - Excessive blood loss PV >24h after delivery. Peak incidence: 5–12d after delivery. Cause - Postpartum infection—sometimes associated with retained placental tissue or clot. OHGP 5th Ed Page 811

19. A 24 years old G3P2 presents at 32 wks of gestation with painless spotting after coitus. What is the single most appropriate initial diagnostic test?
A Colposcopy

B Laparoscopy

C Pelvic exam

D Transabdominal ultrasound

E Transvaginal ultrasound

d. APH—typically painless bleeding >20wk with a peak incidence at 34wk. OHGP 5th Ed Page 810

20. A 4 weeks old baby boy is brought by her mother with complains of projectile vomiting of milk with every breast feed since last one week. He is keen to feed after vomiting. His pulse is 160 bpm Capillary refill time is 3 sec with cold hands & feet. Bowel sounds are normal. His last wet nappy was 12 hours ago. His weight is 3.5 Kg. What is the most appropriate diagnosis?
A Biliary atresia

B Pyloric stenosis.

C Sepsis

D Uremia

E UTI

b. Infantile hypertrophic pyloric stenosis usually develops in the first 3–6wk of life (rare >12wk). Presentation:

- Projectile vomiting of milk—no bile. The child is still hungry after vomiting and immediately feeds again. Rarely there is haematemesis
- Faltering growth

- Dehydration and constipation (‘rabbit pellet stools’)
- Pyloric mass (feels like an olive) is palpable in the right upper abdomen (95%)—especially if the child has just vomited
- Visible peristalsis in the epigastrium after a test feed. OHGP 5th Ed Page 851

21. A 5 years old child brought with puffy face and pedal edema since last two weeks. His lab work up shows
Creatinine: 0.9 mg/dl Albumin: 2.0 g/dl
Triglycerides: 360 mg/dl
Urinalysis shows proteins with no RBCs or casts. What would be the most common cause in this case?
A Acute tubular necrosis

B Focal segmental glomerulonephritis

C Membranous nephropathy

D Minimal change disease

E Post streptococcal glomerulonephritis

d. Nephrotic syndrome - Proteinuria, hypoalbuminaemia, and oedema. Often associated with ↑ cholesterol. Causes: Minimal change glomerulonephritis (GN) (90% children, 30% adults). OHGP 5th Ed Page 412

22. A 8 years old boy with normal intelligence has a history of fighting with other children & torturing birds & animals. When asked why he does so, he answers that he does so just for fun, Which of the following describes best about his behaviors?
A Attention deficit hyperactivity disorder

B Attention seeking behavior

C Autistic spectrum disorder

D Conduct disorder

E Normal behavior for this age

d. Conduct disorder - Poor behaviour (e.g. aggression, destructive tendencies, and antisocial behaviour) are common complaints. Tolerance varies from family to family. Try simple strategies such as rewarding good behaviour and ignoring poor behaviour ± ‘time-out’ strategies. If not succeeding, consider referral to CAMHS. OHGP 5th Ed Page 889

23. 10 years old child with normal intelligence frequently gets in to trouble at school because he interrupts the teachers, disturbs other students & cannot sit still in the class.
What is the single most appropriate initial treatment for him?
A Amitriptyline (Tryptanol)

B Dexamphetamine (Dexedrin)

C Haloperidol (Serenace)

D Methylphenidate (Ritalin)

E Resperidone (Resperidal)

d. Persistent problems/severe impairment. Refer to community paediatrics or child and adolescent mental health service for diagnostic assessment. Specialist treatment includes behavioural therapy ± drug therapy (e.g. methylphenidate). OHGP 5th Ed Page 895

24. Mother brings her 2 weeks old baby saying that he is not putting weight in spite of good breast feeding & good care. His birth weight was 3.4 Kg and his current 3.0 Kg.

What is the next appropriate step in management of this child?
A Add top up formula feeding

B Advise gripe water before feeding

C Ask for any intercurrent illness

D Reassure that this is normal

E Shift to soya based formula

c. A newborn normally loses up to 10% of birth weight in the first few days but should regain it by 10–14 days. A persistent weight loss at 2 weeks requires evaluation for underlying issues like infections, feeding difficulties, or metabolic disorders before considering formula supplementation.

25. A 3 years old child is brought with severe paroxysms of abdominal pain and vomiting since last 1 day. The child screams with pain & becomes pale. Episodes last for few minutes and occur after every 15 minutes. There is a 2 x 8 cm^2 mass in right side of abdomen.
What is the most likely diagnosis?
A Appendicitis

B Intussusception

C Meckel's diverticulum

D Pyloric stenosis

E Worm infestation

b. Abdominal colic—paroxysms of pain during which the child draws up his/her legs—the child often screams with the pain and becomes pale. Episodes usually are 10–15min apart and last 2–3min but become more frequent with time

- Vomiting—early symptom
- Rectal bleeding—passage of blood (‘redcurrant jelly stool’) or slime per rectum is a late sign
- Sausage-shaped mass in the abdomen—usually in the right upper quadrant—though not always present. OHGP 5th Ed Page 869

26. Mother brings her 6 months old child having seizure for the first time. You found his throat congested & temp is 103°F. Anterior fontanel is flat and the child is taking feed normally.
What is the most likely prognosis of this child?
A. Full recovery by 6 years

B. High chances of epilepsy

C. Life long medication

D.Mental retardation

E. Physical disability

a. Febrile convulsions recur in subsequent febrile illness in ~30% of children. 1% of children having a febrile convulsion go on to develop epilepsy (compared to 0.4% of children who do not). OHGP 5th Ed Page 501

27. 16 days old child is brought by her mother with gradually progressive jaundice from 2nd day of his birth & passing white stools. His blood chemistry shows Buliribin of 16 mg % with a direct buliribin of 14 gm %
What is the most likely diagnosis?
A Biliary atresia

B Hemolysis

FREE SOURCE

C Hypothyroidism

D Physiological jaundice

E Septecemia

a. Cholestatic jaundice – Biliary Atresia

28. 8 years old girl is brought with 3 days history of fever 101°F, vomiting, headache & seizure. CSF findings show sugar 30 mg/dl, protein 120 mg/dl, neutrophils 20% lymphocytes 80%. What is the most probable diagnosis?
A Bacterial meningitis

B Fungal meningitis

C Toxoplasmosis

D Tuberculous meningitis

E Viral meningitis

d. The CSF findings of low sugar (30 mg/dl), elevated protein (120 mg/dl), and a predominance of lymphocytes (80%) suggest a chronic or subacute infection. These features are most consistent with tuberculous meningitis, which typically presents with lymphocytic pleocytosis, low glucose, and high protein levels. Thus, the most probable diagnosis is Tuberculous meningitis.

29. A 5 years old girl is brought with fever & pallor for the last three weeks. Her examination shows anemia, petechie, lymphadenopathy, bone tenderness & hepatoslenomegaly.
What is the most probable diagnosis?
A Acute leukemia

B Aplastic anemia

C Idiopathic thrombocytopenic purpura

D Infections mononucleosis

E Non-Hodgkin's lymphoma

a. The most probable diagnosis is Acute leukemia. The combination of anemia, petechiae (suggesting thrombocytopenia), lymphadenopathy, bone tenderness, and hepatosplenomegaly is characteristic of acute leukemia, particularly acute lymphoblastic leukemia (ALL) in children. This presentation reflects bone marrow infiltration and failure, leading to pancytopenia and systemic symptoms.

30. A 14 years old Indian child presents with hypo pigmented patches on his body with impaired sensations.
What is the most appropriate treatment option?
A Clotrimazole cream

B Oral Dapsone

C Oral prednisolone

D PUVA therapy

E Selenium sulphide shampoo

b. The most appropriate treatment is Oral Dapsone. The presentation of hypopigmented patches with impaired sensation is characteristic of leprosy (Hansen's disease). Dapsone is a key component of multidrug therapy (MDT) for leprosy, typically combined with rifampicin and clofazimine, depending on the disease classification (paucibacillary or multibacillary).

FH RESOURCE

31. A 4 years child has constipation from the age of 6 months. He passes hard bulky stools on every 3rd or 4th day. Rectal examination shows dilated ampula & faeces presents there. What is the most likely diagnosis?

A Carcinoma of colon

B Congenital hypothyroidism

C Functional constipation

D Hirschprung's diseases

E Rectal polyp

c. Chronic constipation from infancy with infrequent passage of hard, bulky stools and a dilated rectal ampulla filled with feces suggests functional constipation. Hirschsprung's disease is less likely because it typically presents with a history of delayed meconium passage, abdominal distension, and an empty rectal ampulla on examination.

32. A 4 years old child is having wheezing & difficulty in sleep at night. Previously he was well controlled on salbutamol & beclomethasone (400 Micrograms/day) inhalers.
What would be your next step in management?

A Increase steroids

B Ipratropium

C Montelukast

D Salmetrol

E Terbutaline

c. According to asthma guidelines, if a child on low-dose inhaled corticosteroids (ICS) has worsening nocturnal symptoms, a leukotriene receptor antagonist like montelukast is recommended as an add-on therapy before increasing ICS dose or adding a long-acting beta-agonist (LABA) like salmeterol.

GINA 2024 – CHILDREN 5 YEARS AND YOUNGER

PREFERRED CONTROLLER CHOICE	**STEPS 1** (Insufficient Evidence for daily controller)	**STEP 2** Daily "Low Dose Inhaled Corticosteroids (ICS)	**STEP 3** Double "Low Dose	**STEP 4** Continue Controller & ref for specialist assesment
Other controller options (limited indications, or less evidence for efficacy or safety)	*Consider intermittent short course ICS at onset of illness*	*Daily Leukotriene Receptor Antagonist (LTRA) or intermittent short course of ICS at onset of respiratory illness*	*Lose dose ICS + LTRA, Consider specialist referral*	*Add LTRA or increase ICS frequency or add intermittent ICS*
RELIEVER	As-needed Short acting beta$_2$-agonists			

33. 4 years old child comes with fever for the last one week, which is poorly responding to antipyretics and antibiotics. He has a polymorphic rash, redness of tongue, palms & soles & unilateral cervical lymphadenopathy. He also has bilateral conjunctivitis and cracked lips. Skin of fingers is peeling off.
What is the most likely diagnosis?

A Infection mononucleosis

B Kawasaki's disease

C Scalded skin syndrome

D Scarlet fever

E Viral exanthemas

b. Kawasaki's disease - Predominantly affects children <5y, Cause unknown, Diagnosis: diseases with similar presentations have been excluded and ≥5 of: Fever for ≥5d, Bilateral conjunctivitis, Polymorphous rash, Changes in lips/mouth—red, dry, or cracked lips; strawberry tongue; diffuse redness of mucosa, Changes in extremities: reddening of palms/soles; oedema of hands/feet; peeling of skin of hands, feet, and/or groin, Cervical lymphadenopathy >15mm diameter (usually single and painful), ↓ suspicion if poor response to antipyretics, If suspected refer for urgent aediatric assessment, Early treatment (<10d after onset) with IVimmunoglobulin and aspirin ↓ incidence and severity of aneurysm formation as well as giving symptom relief, Complications: Coronary arteritis with formation of aneurysms; accelerated atherosclerosis. OHGP 5th Ed Page 501

34. 2 years old child presents for follow up visit after one week of antibiotic therapy which was started after last week for dysuria, frequent urination & abdominal pain.
What would be your next step in his management?
A DMSA scans

B MCUG

C Urinalysis

D Urine for C/S

E X-ray KUB

d. Prescribe for 3d for lower UTI and 7–10d for upper UTI. Choice of antibiotic depends on local guidelines, but first line is usually trimethoprim or nitrofurantoin. Review after 24–48h if not improving, and send a urine sample for M,C&S if a sample has not already been sent. OHGP 5th Ed Page 856

35. Mother of 5 years old child has recently read an article on U.T.I. Her child had UTI once in childhood. She is curious to know as to what could be the possible outcome in future? Which is the "least" likely consequence of U.T.I in future?
A Adult pylonephritis

B Hypertension

C Renal carcinoma

D Renal failure

E Renal scarring

C. Consequences - 5–15% develop renal scarring <2y after first infection. Infections causing renal scarring are associated with adult pyelonephritis, ↑BP, impaired renal function, and renal failure. Prognosis is worst for children with recurrent infection, VUR, and scarring at first presentation. OHGP 5th Ed Page 856

36. 25 years old patient was found to have WBC = 10-12 HPF in urinalysis on routine screening. He does not have any urinary symptoms. Repeated urine culture shows no growth. Ultrasound KUB is also normal.
What could be the most likely cause in him?

A Chronic Prostatitis

B Glomerulonephritis

C Renal tuberculosis

D Urethral syndrome

E Vesicoureteric reflux

c. **Sterile pyuria** refers to the presence of white cells in the urine without a detectable urinary tract infection (UTI). A repeat test with a clean catch midstream urine (MSU) sample is recommended, and if sterile pyuria persists, referral to urology is advised. Possible causes include inadequately treated UTI, appendicitis, urinary calculi, prostatitis, bladder tumor, renal tuberculosis, papillary necrosis, and UTI with failure to culture an organism. Other causes include interstitial nephritis or cystitis, polycystic kidney disease, and chemical cystitis, such as that due to radiotherapy. OHGP 5th Ed Page 421

37. A 55 years old male comes with having repeated episodes of left renal colic radiating to groin since last 1 month. He is having temperature of 102°F & renal punch is positive. Urinalysis shows >20 WBC.
What is the single most appropriate treatment?
A Ampicillin

B Ciprofloxacin

C Doxycycline

D Nitrofurantoin

E Trimethprim

b. Pyelonephritis – For mild cases, the recommended antibiotic is **Ciprofloxacin** 500 mg every 12 hours orally, with dosages based on normal renal function.
For severe cases, the treatment options include Cefotaxime 1 g every 8 hours IV/IM or Ceftriaxone 1 g every 24 hours IV/IM, which should be considered equal treatment options unless otherwise indicated. These may be used alone or in combination with Amikacin 15 mg/kg every 24 hours IV and/or Gentamicin 5 mg/kg every 24 hours IV.
In settings where ESBL-producing isolates are highly prevalent, amikacin or gentamicin should be considered. Additionally, in critically ill patients, amikacin or gentamicin can be given in combination with cefotaxime or ceftriaxone for enhanced coverage. The WHO AWARe (Access, Watch, Reserve) antibiotic book 2022

38. A 40 years old patient comes with his renal stone analysis report showing that it consists of uric acid. He has been drinking ample of water. What would you advice him to prevent further stones formation?
A Avoid chocolates & citrus fruits

B Avoid green leafy vegetables

C Bendroflumethiazide

D D-pencillamine

E Urinary alkalinization

e. Urate - Avoid beer as has uricosuric effect; allopurinol; urinary alkalinization with potassium citrate (pH >6.5). OHGP 5th Ed Page 420

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39. A 65 years old man comes with poor urinary stream & terminal dribbling. He also has to get up at night for urine. His ultrasound shows > 150 ml residual urine and prostate size is 30 G. His B.P is 120/80 mm Hg.
What is the single most appropriate initial management plan?
A Finasteride

B Prazocin

C Trial of antibiotics

D TURP

E Watchful waiting

b. Benign prostatic hypertrophy; Drug therapy - Those with mild/moderate symptoms who are troubled by their symptoms. Consider:

- α-adrenoceptor agonists, e.g. prazosin, doxazosin—watch for postural hypotension. ↓ symptomatic worsening
- 5α-reductase inhibitors, e.g. finasteride—best for patients with bulky prostates—takes up to 6mo to work. ↓ risk of urinary retention
- Combination therapy—α-adrenoceptor agonist and 5α-reductase inhibitor ↓ progression by 66%—more than either agent alone. OHGP 5th Ed Page 430

40. A 68 years old man presents with small losses of urine on coughing or straining after his prostatectomy. What is the most appropriate step of management for him?
A Bladder training programmes

B Catherization

C Imipramin

D Oxybutinin

E Pelvic exercise

e. Stress incontinence - Treatment Pelvic floor exercises, continued >3mo help 60% (taught by physiotherapists/continence advisors; leaflets available)—may be assisted by vaginal cones and/or electrical stimulation. OHGP 5th Ed Page 424

41. A 26 years old HIV positive patient presents with erythematous rash on palms & soles, malaise and fever since 2 weeks. He also had a painless ulcer on his penis 3 months ago.
What would be the specific diagnostic test at this stage in relation to his HIV status?
A FTA

B PCR

C RPR

D TPHA

E VDRL

b. At this stage, the specific diagnostic test in relation to his HIV status would be HIV RNA PCR (viral load test).

42. A 30 years old man presents with painless ulcer on his penis since 3 days. What would be the specific initial test to identify etiological organism?
A Blood culture

B Dark field microscopy

C Gram stain

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D Ulcer biopsy

E Zeil Nelson stain

b. Syphilis - Laboratory diagnosis: (i) dark-field microscopic confirmation of T. pallidum; (ii) screening nontreponemal tests, such as VDRL and RPR; and (iii) confirmatory treponemal specific tests, such as FTA-ABS and TPHA. Swanson Family medicinie Review 9th Ed 424

43. A 40 years old man presents with erythematous, itchy rash all over body 2 hour after taking Amoxicillin. His pulse is 90 BPM, RR 18 /min, BP 110/70 mm Hg.
What would be the most appropriate initial treatment for his problem?
A Adrenaline

B Calamine lotion

C Diphenhydramine

D IV Hydrocortisone

E Prednisolone

c. Management of acute urticaria - Try antihistamines for itch—non-sedating for daytime (e.g. cetirizine, fexofenadine) ± sedative if interferes with sleep (e.g. chlorphenamine, hydroxyzine).
Topical menthol 1% cream is an alternative/adjunct to antihistamines
If severe, consider short-course steroids (e.g. prednisolone 40mg od for 3–5d). If rebound symptoms after stopping, seek specialist advice. OHGP 5th Ed Page 587

44. A lactating mother presents with muco-purulent vaginal discharge, post coital bleeding, abdominal pain & fever of 100°F for last 5 days. There is hyperemia of cervix with discharge from cervical OS. She was give single dose of Ceftriaxone intramuscularly.
Which other medicine would you like to add in her treatment?
A Ciprofloxacin

B Doxycycline

C Erythromycin

D Metronidazole

E Spectinopmycin

c. For Pelvic Inflammatory Disease (PID) in lactating mothers, Ceftriaxone (IM) covers gonorrhea, while Erythromycin (500 mg four times daily for 14 days) or Azithromycin (1g once, then 500 mg daily for 2 days) can be used to treat Chlamydia safely during breastfeeding. Metronidazole may also be added if anaerobic coverage is needed.

45. A 30 years patient comes with reports showing Hepatitis BsAg positive. ALT is 50 IU & PCR 4500 IU/ml.
What would be the strategy at this stage?
A Give HB vaccination

B Liver biopsy

C Start antiviral drug

D Start Interferons

E Watchful waiting

b. Cirrhosis - Occur when the liver can no longer compensate for the damage to it—jaundice, hepatic encephalopathy, leuconychia, and oedema (due to hypoalbuminaemia). **liver enzymes (ALT, AST) may decrease in advanced cirrhosis** despite ongoing liver damage Liver biopsy is an alternative if TE is not suitable. Do not use liver function blood tests to rule out cirrhosis. OHGP 5th Ed Page 397

46. A 30 years old mother brings her 5 years child with chicken pox, she is having 2 weeks old baby at home. She is asking how she can protect her 2 weeks baby from chicken pox.
What is the single most appropriate management step?
A Acyclovir prophylaxis

B Varicella vaccine + immunoglobulin

C Varicella zoster Immunoglobulin

D Varicella zoster vaccine

E Watchful waiting

c. Non-immune, immunosuppressed patients, pregnant women or neonates with significant exposure to chickenpox/shingles, should receive zoster immunoglobulin (VZ-Ig) <3d after contact. Check antibody levels if immune status is unknown. OHGP 5th Ed Page 628

47. A 12 years old boy is brought in emergency after a car accident. He has a lacerated spleen for which surgeon performed splenectomy. He has not received any previous vaccination in past.
What vaccine is "NOT" recommended for this patient?
A Hemophilus influenza

B Influenza

C Meningococcal

D Pneumococcal

E Varicella zoster

e. Asplenic patients - Avoid live vaccines BCG, cholera, measles, mumps, rubella, varicella, smallpox, Japanese encephalitis. All asplenic patients (or functionally asplenic patients, e.g. patients with sickle cell disease) are at ↑ risk of bacterial infection. Warn patients about severe malaria and other tropical infections when travelling abroad. Admit to hospital if infection develops despite prophylactic measures. Ensure that asplenic patients have:
Prophylactic antibiotics Oral penicillin continuously until age 16y or for ≥2y post-splenectomy—whichever is longer, Stand-by amoxicillin To start if symptoms of infection begin. OHGP 5th Ed Page 626

48. A 45 years old hypertensive patient comes for routine BP check up. He asks you about influenza because one of his cousins living abroad is suffering from seasonal influenza.
His BP is 180/100 mm Hg. His rest of the examination is un-remarkable.
What would be the appropriate step at this stage?
A Amantadine

B Immunoglobulin

C Influenza vaccine

D Oseltamivir

E Re-assurance

e. Reassure the patient. No intervention required.

49. A 60 years old white washer presents with pain in his neck and vertigo for last one month when he paints the ceiling of a room. Lateral neck movements are restricted.
What would be the diagnosis?
A Cervical disc prolapse

B Cervical spondylosis

C Multiple myeloma

D Spasmodic tortocollis

E Spondylolisthesis

b. Cervical spondylosis - Degenerative disease of the cervical spine. May cause pain but minor changes are normal (especially >40y) and usually asymptomatic. Pain is generally intermittent and related to activity. Examination reveals ↓ neck mobility. Severe degeneration can cause nerve root signs. Treat with analgesia. X-ray only if conservative measures fail, troublesome pain, nerve root signs, or psoriasis (?psoriatic arthropathy). OHGP 5th Ed Page 448

50. A 38 years old construction worker had back pain which subsided with 2 hour. He now complains of increasing numbness & tingling on both legs & leaking urine.
What would be the possible diagnosis?
A Bladder instability

B Overflow incontinence

C Spinal cord compression

D Stress incontinence

E Urge incontinence

c. Spinal cord compression - Maintain a high level of suspicion if history of cancer and new back pain—especially if known bony metastases or tumour likely to metastasize to bone. Presents with:

- Back pain, worse on movement—often appears before neurology
- Neurological symptoms/signs—can be non-specific, e.g. constipation, weak legs, urinary hesitancy. Lesions above L1 (lower end of spinal cord) produce upper motor neurone signs (e.g. ↑ tone/reflexes) and a sensory level; lesions below L1 produce lower motor neurone signs (↓ tone/reflexes) and peri-anal numbness (cauda equina syndrome)

Management: Prompt treatment (<24–48h from first neurological symptoms) is needed; once paralysed, <5% walk again. Treat with oral dexamethasone 16mg/d and refer for same day assessment and surgery/radiotherapy unless in final stages of disease. OHGP 5th Ed Page 453

51. A 75 years old person complains of severe backache for last 3 weeks. He has used many pain killers but no relief.
What would be the most appropriate initial step in management?
A CT Scan

B MRI

C Myelogram

D Physiotherapy

E X-rays

e. In an elderly patient with severe back pain, especially if persistent and unresponsive to analgesics, an X-ray is the first-line investigation to assess for fractures (e.g., vertebral compression fractures), malignancy, or degenerative changes. If red flags (e.g., neurological deficits, weight loss, night pain) are present, further imaging like MRI may be required.

52. A 50 years old patient presents pain on internal rotation of shoulder joint for last 1 month. Pain is maximum when she starts lifting her arm. There is no history of trauma, fever or weight loss. What would be the most probable diagnosis?
A Frozen shoulder

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B Osteo arthritis of shoulder

C Polymyalgia rheumatica

D Rotator cuff injury

E Shoulder dislocation

d. Subacromial impingement Pain occurs in a limited arc of abduction (60–120°—painful arc syndrome) or on internal rotation. If <40y, associated with glenohumeral instability from connective tissue laxity, or labral injury. If older, often due to chronic rotator cuff tendinitis or functional cuff weakness/tear. OHGP 5th Ed Page 460

53. A 55 years old gardener presents with pain in his lateral side of wrist joint while gardening for last 3 weeks. There is tenderness at styloid process of radius which increases with ulnar deviation of wrist. He has used multiple pain killers without relief.
What would be the most appropriable next management step?
A Physiotherapy

B Surgery of wrist

C Topical capsaicin cream

D Triamcinolone injection

E X-ray wrist

d. Tenosynovitis - Causes pain and stiffness in the line of the tendon and crepitus over the affected tendon. The most common site is the base of the thumb (de Quervain's tenosynovitis). Injecting steroid and LA (e.g. hydrocortisone 25mg + 1mL 1% lidocaine) into the space between tendon and sheath can help. OHGP 5th Ed Page 460

54. A 32 years old hypothyroid patient presents with pain in the lateral side of hands and fingers for last 2 weeks. She also complains of pins and needles sensation, numbness & wasting of thenar eminence.
What would be the most definitive treatment of her condition?
A Physiotherapy

B Surgery of wrist

C Topical capsaicin cream

D Triamcinolone injection

E X-ray wrist

b. Pain in the radial 3½ digits of the hand ± numbness, pins and needles, and thenar wasting. Due to compression of the median nerve as it passes under the flexor retinaculum. Worse at night. Symptoms are improved by shaking the wrist. Associations: pregnancy, hypothyroidism, DM, obesity, and carpal arthritis. Management - GP treatment— night splints may help ± carpal tunnel steroid injection. Less likely to help if age >50y or symptoms >10mo. If GP treatment fails, constant paraesthesiae and/ or triggering of fingers, refer to orthopaedics for division of the flexor retinaculum. OHGP 5th Ed Page 460

55. A 30 years old asthmatic patient presents with severe right hip pain & he is unable to walk for last 15 days. He is taking high doses of steroids. What would be the most likely diagnosis?
A Avascular necrosis

B Fascia lata syndrome

C Osteoarthritis of hip joint

D Pseudogout of hip

E Trochanteric bursitis

a. Avascular necrosis - May present with hip pain. Have a high level of suspicion in patients with risk factors— SLE, sickle cell disease, high alcohol consumption, pregnancy, or corticosteroids. X- ray or bone scan may confirm diagnosis but MRI is most sensitive. Specialist management is needed. Usually progresses to cause OA. OHGP 5th Ed Page 464

56. A 28 years old girl presents with severe pain in her knees on prolonged sitting for last one month. Pain increases when climbs down stairs. What would be the most probable diagnosis?

A Chondromalacia patellae

B Crystal arthropathy

C Infra patella bursitis

D Osgood schlater disease

E Osteoarthritis of knee

a. Chondromalacia patellae - Common in teenage girls. Pain on walking up or down stairs or on prolonged sitting. Signs: pain on stressing the undersurface of the patella. Arthroscopy (indicated only in severe cases) reveals degenerative cartilage on the posterior surface of the patella. Treat with analgesia + physiotherapy (vastus medialis strengthening ↓ pain in 80%). If persistent, exclude spondyloarthropathy. OHGP 5th Ed Page 469

57. A 42 years old clerk complains of difficulty in walking because of pain & swelling in right knee joint which started when he jumped out of a running bus. He cannot make his knee straight. What would be the most probable diagnosis?

A Anterior cruciate ligament injury

B Intra articular Meniscal injury

C Lateral collateral ligament injury

D Medical collateral ligament injury

E Posterior cruciate ligament injury

b. Meniscal lesions Twisting with the knee flexed can cause medial (bucket handle) meniscal tears and adduction with internal rotation can cause lateral cartilage tears. Symptoms/ signs: Locking of the knee— extension is limited due to cartilage fragment lodging between the condyles. OHGP 5th Ed Page 469

58. A 65 years old woman presents with acute pain at lateral side of upper thigh. She has osteoarthritis in both knee & hips. There is tenderness & swelling on side of hip joint. What would be the most likely diagnosis?

A Avascular necrosis

B Fascia lata syndrome

C Pathological fracture

D Septic arthritis of hip

E Trochanteric bursitis

e. Greater trochanter pain (trochanteric bursitis) - Can mimic ± coexist with hip OA. May be associated with muscle weakness around the hip. Diagnosis: point tenderness over the greater trochanter. Consider local steroid injection if trochanteric bursitis is likely. Refer to physiotherapy to strengthen hip musculature to prevent recurrence. OHGP 5th Ed Page 464

59. A 35 years old healthy woman is concerned that she may develop osteoporosis as her mother got fracture of hip joint at the age of 60 years. What would be the most appropriate diagnostic test at this stage?
A Alkaline phosphates

B Bone Mineral Density

C Serum calcium levels

D Serum Viatmin D

E X-ray hip for osteopenia

b. A central DEXA is the gold standard for assessment of BMD. During this procedure, two beams of different energy are directed at the patient. The difference in the absorption rate of the two energy beams by the patient’s body is recorded to quantify the amount of bone mineral content. A BMD is computed at different sites, including the lumbar spine (L1–L4), femoral neck, and total proximal femur (hip); Ward’s triangle is a computer generated area having the lowest BMD in the femoral head and should not be used for diagnosis of osteoporosis. At least two different sites, preferably the spine and hip, should be measured. Of all measurements, total hip BMD is the best predictor of future hip fracture. Swanson Family medicinie Review 9th Ed 351.

60. A 70 years old woman fractured her hip after falling down in bathroom. Her X ray also show osteopenia.
What would be the most specific treatment at this stage?
A Alendronate

B Calcitonin nasal spray

C Hormone Replacement therapy

D Reloxifen

E Vitamin D 3 injection

a. For prevention and treatment of osteoporosis:
- Bisphosphonates (demonstrated efficacy for verte-bral fracture reduction; alendronate and risedronate for nonvertebral and hip fracture. Reduction as well)
- Raloxifene (demonstrated efficacy for vertebral. Fracture reduction only). Swanson Family medicinie Review 9th Ed 355.

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